Spanish Creek Bridge Project

PLUMAS COUNTY, CALIFORNIA
02-PLU-70-PM 35.1/35.5
373100

Final Environmental Impact Report / Environmental Assessment and Section 4(f) Evaluation

Prepared by the
State of California Department of Transportation

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C. 327.

December 2008

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Replacement of the Spanish Creek Bridge (Bridge No. 09-0015) on State Route 70 in Plumas County near Keddie

FINAL ENVIRONMENTAL IMPACT REPORT / ENVIRONMENTAL ASSESSMENT AND SECTION 4(F) EVALUATION

Submitted Pursuant to: (State) Division 13, Public Resources Code
(Federal) 42 USC 4332(2)(C) and 49 U.S.C. 303

THE STATE OF CALIFORNIA
Department of Transportation

12/30/08
Date of Approval

JOHN BULINSKI
District Director
California Department of Transportation
District 2

CALIFORNIA DEPARTMENT OF TRANSPORTATION
FINDING OF NO SIGNIFICANT IMPACT

FOR

Spanish Creek Bridge Replacement Project
02-373100-PLU-70-PM 35.1/35.5

The California Department of Transportation (Caltrans) has determined that Alternative B (Construction of a new bridge and removal of the existing bridge) will have no significant impact on the human environment. The FONSI is based on the attached Environmental Assessment (EA), which has been independently evaluated by Caltrans and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. It provides sufficient evidence and analysis for determining that an EIS is not required. Caltrans takes full responsibility for the accuracy, scope, and content of the attached EA.

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried-out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C. 327.

John Bulinski, District Director
Caltrans, District 2

12/30/08
Date

Summary

Caltrans is proposing replacement of the Spanish Creek Bridge (Bridge No. 09-0015) on State Route (SR) 70 in Plumas County, post mile 35.3, near the community of Keddie. The proposed project is a joint undertaking by the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA), and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). Caltrans is the lead agency under CEQA. In addition, FHWA's responsibility for environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C. 327, effective July 1, 2007.

SR 70 is a two-lane conventional highway that connects SR 99 near Sacramento in Sutter County and U.S. Route 395 in southeastern Lassen County. The Spanish Creek Bridge is eligible for inclusion in the National Register of Historic Places. It is also a contributive element of the Feather River Highway Historic District (SR 70 from post mile 35.37 in Butte County to post mile 36.0 in Plumas County), which is also a National Register eligible property.

The purpose of this project is to provide a road crossing that meets modern highway design standards and accommodates interregional transportation needs. The existing Spanish Creek Bridge was constructed in 1932 and is approaching the end of its service life. The bridge exhibits signs of structural fatigue, does not meet modern seismic standards, lacks standard shoulder width, and cannot accommodate some large permit loads due to lane width and structural limitations for weight loading.

Due to traffic load restrictions on the existing bridge and the condition of the structural steel, permit loads on this section of SR 70 are often denied. The bridge is approximately 23 feet wide between curbs and has an 80,000 lb. maximum load restriction. Fires, landslides, and train derailments have occurred in the Feather River Canyon requiring the deployment of heavy equipment. PG&E, Union Pacific Railroad, and the California Department of Forestry and Fire Protection have been denied access through the area in the past due to the weight restriction. In addition, SR 70 is occasionally used as a secondary route for truck traffic crossing the Sierra Nevada mountain range when Interstate 80 is closed due to weather or other circumstances. Bridges on SR 70 located west of the Spanish Creek Bridge had the same seismic deficiencies and load restrictions. A project to correct these deficiencies was completed in 2006, at which time, the Spanish Creek Bridge

became the only remaining structure on SR 70 that limits permit loads. The Spanish Creek Bridge also does not have standard width shoulders, which makes maintenance difficult do to the need for traffic control and potential lane closures.

Two build alternatives and a No Build alternative were developed to address the purpose and need for the project. A fourth alternative (Alternative C) was considered, yet this alternative would only delay the need for eventual replacement of the bridge and was therefore eliminated from further consideration. However, since this eliminated alternative offered avoidance of impacts to historic resources, it was included in the Section 4(f) Evaluation in Appendix B of this document.

Alternatives considered for this project included:

- Alternative A - construction of a new bridge and seismically retrofit the existing bridge.
- Alternative B - construction of a new bridge and removal of the existing bridge.
- Alternative D - the “No Build” alternative, which assumes the existing bridge would be maintained and substantial improvements would not be made.

Based on an evaluation of environmental impacts, consideration of public input, and approval of the Final EIR/EA, Caltrans has identified Alternative B (Build New Bridge and Remove Existing Bridge) as the preferred alternative. Alternative B provides a modern, low maintenance bridge with standard shoulder width. The bridge will accommodate interregional transportation needs, including large permit loads. Traffic will remain on the existing bridge during construction of the replacement bridge, thereby reducing traffic delays and the need for a detour. The existing bridge will be removed upon completion of the new bridge, which will eliminate the cost associated with the routine monitoring and maintenance of the deteriorating structure.

The proposed project also considered two different alignments, Alignments 2 and 4. Alignment 2 has been carried forward, however, Alignment 4 was eliminated from further consideration due to potentially greater impacts upon the environment.

All of the build alternatives would require a construction staging area at each corner of the bridge at highway elevation and beneath the bridge at stream elevation. The main construction staging area would be situated beneath the bridge. An extensive falsework system would be required to support the existing and proposed bridges during construction and demolition. In addition, significant amounts of materials, equipment, and workers would need to be transferred to and from the main construction staging area beneath the bridge. Methods of accessing the main

staging area are limited due to the steep terrain. Standard cranes do not have the reach and lifting capabilities, nor are they efficient in terms of speed and the number of tasks they can accomplish in a given timeframe. Construction of a temporary construction access road system from the highway elevation to the area beneath the bridge is not feasible due to steep terrain and limited area. Based on an assessment of potential access points at each corner of the bridge, it was determined that it would not be feasible to construct an access road with grades and turning radii necessary to accommodate various types of construction vehicles. Natural barriers include the steep terrain, railroad, highway, and creek. Even if there were sufficient area, the creation of a temporary access road would result in increased environmental impacts due to factors such as increased vegetation removal, erosion potential, habitat destruction, aesthetic impacts, and a prolonged construction timeframe. Therefore, it is proposed to utilize the existing Spanish Creek Campground access road. The paved access road has sufficient width and leads to an open area at stream elevation where a temporary trestle would be constructed to access the opposite side of the creek. From the opposite side of the creek, the road would be extended, avoiding some of the larger trees, to the main staging area beneath the bridge. For safety purposes, the campground would be closed for the duration of major bridge construction operations. An assessment of impacts upon the campground and proposed mitigation measures are discussed in the Section 4(f) Evaluation in Appendix B of this document.

Implementation of either Alternative A or B would require the acquisition of approximately 2.7 acres of additional highway right-of-way immediately west of the existing highway. In addition, existing overhead utility lines that cross the highway in the vicinity of the campground entrance, and then run parallel to the west side of the highway, would require relocation.

Some impacts determined to be significant under CEQA may not lead to a determination of significance under NEPA. Because NEPA is concerned with the significance of the project as a whole, it is quite often the case that a “lower level” document is prepared for NEPA. One of the most commonly seen joint document types is an Environmental Impact Report/Environmental Assessment (EIR/EA).

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 U.S.C 303, declares that “it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.”

Section 4(f) specifies that the Secretary of Transportation may approve a transportation program or project requiring use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance (as

determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if:

1. there is no prudent and feasible alternative to using that land; and

2. the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

Section 4(f) further requires consultation with the Department of the Interior and, as appropriate, the involved offices of the Departments of Agriculture and Housing and Urban Development in developing transportation projects and programs which use lands protected by Section 4(f). If historic sites are involved, then coordination with the State Historic Preservation Officer is also needed.

The following Section 4(f) resources have been identified: The Spanish Creek Bridge, Feather River Highway Historic District, Plumas National Forest Recreation Area, Maxwell Ditch segment, and the Utah Construction Road segment.

Following are some of the consequences and estimated construction costs for the respective Alternatives:

	Alternative A (new bridge/seismic retrofit existing bridge)	**Alternative B** (new bridge/demolish existing bridge)	**Alternative D** ("no build")
Significant effect upon Historic Bridge	Yes	Yes	Eventually
Require use of Campground	Yes	Yes	No
Affect Historic Highway District	Yes	Yes	No
Satisfy Purpose & Need	Yes	Yes	No
Estimated Construction Cost ($millions) from 2003 PSSR	$29.2	$21.3	N/a

The following regulatory permits will be necessary:

- California Department of Fish and Game, Region 2 - Streambed Alteration Agreement pursuant to Section 1602 of the Fish and Game code
- United States Army Corps of Engineers, Sacramento District – Department of the Army permit pursuant to Section 404 of the Clean Water Act
- Regional Water Quality Control Board, Central Valley Region - Water Quality Certification pursuant to Section 401 of the Clean Water Act

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List of Technical Studies Bound Separately

Chapter 1 Proposed Project

1.1 Introduction

The California Department of Transportation (Caltrans) proposes to replace the Spanish Creek Bridge (Bridge No. 09-0015) on State Route (SR) 70 in Plumas County, post mile 35.3, near the community of Keddie (Exhibits 1 & 2).

The project is included in the State Highway Operation and Protection Program and is funded in the Bridge Rehabilitation Program. Construction is scheduled for the 2009/2010 fiscal year.

SR 70 is a two-lane conventional highway that connects SR 99 near Sacramento in Sutter County and U.S. Route 395 in southeastern Lassen County. The annual average daily traffic volume on SR 70 in the project vicinity is 1,500 vehicles westbound and 3,050 vehicles eastbound.[1] The route is a designated National Scenic Byway from 10 miles north of Oroville to its terminus at U.S. Route 395 in Lassen County. The California Division of Highways constructed what was then known as the Feather River Highway between 1927 and 1932. The Feather River Highway Historic District, a 48-mile section of SR 70 from Jarbo Gap to Keddie, was determined eligible for listing in the National Register in April 1987. The Spanish Creek Bridge was designed by the California Division of Highways and was constructed in 1932. The bridge is a contributing element of the highway historic district and is eligible for inclusion in the National Register of Historic Places on its own merit.

In 1993, the Spanish Creek Bridge was combined with three other bridges in the Feather River Canyon, Rock Creek, Storrie, and Tobin, for a seismic retrofit and structural rehabilitation project. However, the project was postponed so that the funding could be used for emergency projects on Interstate 5 and SR 97 in Siskiyou County. Subsequently, two separate projects were developed to address the need for seismic upgrades and bridge rehabilitation in the Feather River Canyon. One project included Rock Creek, Storrie, Tobin, Pulga, and Howell's bridges. The other project was for the Spanish Creek Bridge. The multiple bridges project was completed in 2006.

[1] Annual average daily traffic is the total volume for the year divided by 365 days. Counts are adjusted to an estimate of annual average daily traffic by compensating for seasonal influence, weekly variation and other variables which may be present.

1.2 Purpose and Need

The purpose of the project is to provide a road crossing that meets modern highway design standards and accommodates interregional transportation needs. The existing Spanish Creek Bridge was constructed in 1932 and is near the end of its service life. The bridge exhibits signs of structural fatigue, does not meet modern seismic standards, lacks standard shoulder width, and cannot accommodate some large permit loads due to lane width and structural limitations for weight loading.

Due to traffic load restrictions on the existing bridge and the condition of the structural steel, permit loads on this section of SR 70 are often denied. The bridge has an 80,000 lbs. maximum load restriction. Fires, landslides, and train derailments have occurred in the Feather River Canyon requiring the deployment of heavy equipment. PG&E, Union Pacific Railroad, and the California Department of Forestry and Fire Protection have been denied access through the area in the past due to the weight restriction. In addition, SR 70 is occasionally used as a secondary route for truck traffic crossing the Sierra mountain range when Interstate 80 is closed due to weather or other circumstances. Bridges located downstream of the Spanish Creek Bridge had the same seismic deficiencies and load restrictions. Projects to correct these deficiencies were completed in 2006, which leaves the Spanish Creek Bridge as the one remaining structure on SR 70 that limits permit loads. The Spanish Creek Bridge also does not have shoulders, which makes maintenance more difficult due to the need for traffic control and potential lane closures.

1.3 Project Description

This section describes the proposed project and the design alternatives that were developed by a multi-disciplinary team to address the project purpose and need while minimizing impacts to the environment. The alternatives considered include:

- Alternative A - construction of a new bridge and seismically retrofit the existing bridge.
- Alternative B - construction of a new bridge and removal of the existing bridge.
- Alternative D - “no build” alternative, which assumes the existing bridge will be maintained and substantial improvements will not be made.

Two different highway alignments and four bridge types were considered for Alternatives A and B, which include replacement structures. The alignments, 2 and 4 (Exhibit 3), are west of and parallel to the existing highway. Alignment 2 would place the new bridge approximately 40 feet west of the existing bridge, centerline to

centerline, while Alignment 4 would place the new bridge roughly 285 feet west of the existing bridge. A decision was made to eliminate Alignment 4 and proceed with Alignment 2 based on the following:

- Preliminary engineering studies indicate that Alignment 4 would require a substantial earth retaining structure on the south side of the proposed bridge to avoid the massive amount of excavation that would otherwise be required to obtain a 1:2 (vertical/horizontal) cut slope. Even with an earth retaining structure, this alignment would produce a substantial amount of excess dirt and rock. Although Alignment 4 reduces the curvature of the highway immediately north and south of the bridge, there is no documented accident history indicating a need to reduce the curvature of the roadway at this location.

- Alignment 4 would cross over the Union Pacific Railroad tunnel. A preliminary geological report indicates that the material is comprised of hard rock that would require blasting. The cost to excavate and dispose of this material is estimated to be three times that of the earthwork costs associated with Alignment 2. Alignment 2 eliminates the need to traverse the Union Pacific Railroad tunnel on the south side of the creek because it is close to the existing highway and conforms with the adjoining highway prior to reaching the railroad tunnel. This would alleviate some concerns related to the structural integrity of the tunnel. Blasting will likely be necessary in the construction of the southern bridge approach and adjoining highway section of Alignment 2.

- Alignment 2 would require less excavation because it is closer to the existing roadbed and conforms to the existing highway sooner than the other alignment. Although earthwork quantities have not been calculated, based on engineering judgment, Alignment 2 would require significantly less excavation. This would minimize construction costs, unsightly cuts and fills, vegetation removal, and disturbed areas subject to erosion.

- Alignment 2 would require less right-of-way because it is the shorter alignment and it is closer to the existing highway.

- Alignment 2 would significantly reduce encroachment within the Spanish Creek Campground.

The four bridge types considered for Alternatives A and B include: 1) steel plate girder, 2) concrete box girder, 3) open-spandrel arch box girder, and 4) open-spandrel arch slab. Photo simulations of each of these bridges at the project location are shown in Exhibit 4. The criteria used for bridge type selection include foundation requirements, cost, and aesthetics. The open-spandrel arch box girder bridge is the preferred bridge type because of its relatively low cost, low maintenance, and its

aesthetic compatibility with the surrounding area. This type of bridge is characteristic of early bridges that were found in the lower reaches of the Feather River Canyon prior to the creation of Lake Oroville. The bridge will have two traffic lanes 12 feet in width, eight foot wide shoulders, and a galvanized steel horizontal rail system. Although a preferred bridge type was identified early in the project development process, it is recognized that any of the four bridges would work equally well with negligible differences in effects upon the environment. Final bridge type selection will be made at the project approval stage.

The method of construction will be left to the discretion of the contractor. Project plans and specifications will identify the desired outcome for each aspect of the project. For example, pilings shall be installed to a specified depth. The specifications do not always direct the contractor how to perform the work necessary to achieve the desired outcome. The contractor therefore could use various methods or types of equipment to achieve the required pile depth.

All of the build alternatives would require construction staging areas, from which cranes could operate, at each corner of the bridge at highway elevation and beneath the bridge at stream elevation. The main construction staging area would be situated beneath the bridge. Given the depth and required span of the highway crossing, construction from the highway elevation only, without a staging area below the bridge, is not an option. Cranes typically used in bridge construction would not have the reach and lifting capability needed to construct the bridge from above. A crane large enough to perform this work is not standard for the industry and would limit the number of qualified contractors. The cost and timeframe for construction would increase due to the expense of mobilizing and setting up such a large piece of equipment. In addition, since the crane is only capable of performing one task at a time, it would be inefficient as a primary method of transferring equipment and materials to the area beneath the bridge.

Significant amounts of materials will be delivered to the construction staging area, including concrete, lumber, and reinforcing steel. In addition, equipment such as cranes, excavators, and concrete trucks will need to gain access to and operate from the main staging area beneath the bridge. Methods of accessing the area beneath the bridge are limited. Construction of a temporary access road from the highway elevation is not feasible due to the steep terrain in the vicinity of the bridge. Based on an assessment of potential access points at each corner of the bridge, it was determined that it would not be feasible to construct an access road with grades and turning radii necessary to accommodate various types of construction vehicles. Natural barriers include the steep terrain, railroad, highway, and creek. Even if there were sufficient area, the creation of a temporary access road would result in increased environmental impacts due to factors such as increased vegetation removal, erosion potential, habitat destruction, aesthetic impacts, and a prolonged

construction timeframe. Therefore, it is proposed to utilize the existing Spanish Creek Campground access road. The primary access and staging areas proposed for construction are shown in Exhibit 5. The campground road is wide and paved and leads to an open area at stream elevation where a temporary trestle would be constructed to access the opposite (south) side of the creek. For safety reasons, the campground would be closed for the estimated three-year period required for major bridge construction activities. From the trestle location on the south side of the creek, a temporary road would be constructed to provide access to a staging area beneath the bridge. It would be possible to align the road such that it avoids some of the larger trees that exist in this area. The area for the proposed access road is above the base floodplain and is flat enough that erosion would not be a significant concern. Placement of gravel and/or asphalt on the temporary roadway could be necessary due to the anticipated weight and volume of truck traffic. It is likely that the deck of the temporary trestle would be removed each year during the rainy season so the structure would not interfere with high flows.

A level work pad would be required beneath the bridge to facilitate construction and demolition operations. Since the creek is relatively shallow at this location, it is likely that a culvert(s) would be placed in the creek channel for the length of the existing and proposed bridges. Clean cobbles, construction fabric, and a layer of gravel could then be placed over the culvert(s) to create a level work pad. The culverts and rock could be removed each winter prior to the onset of winter rains.

If Alternative A or B were implemented, traffic would continue to utilize the existing bridge during construction. Once the new bridge and adjoining sections of highway were completed, traffic would be shifted to the new alignment. The temporary staging areas, access road, and trestle would be removed upon completion of the project.

Other items of work proposed for the project include:

- Reconstruction of the highway storm water system and campground entrance.
- Repair and/or restoration of Plumas National Forest (PNF) land, including but not limited to, grading, vegetation, campsites, and campground road.
- Re-striping and signing on the highway.
- Construction of a paved pullout on SR 70 opposite the campground entrance for Caltrans' Bridge Maintenance crew.

Following public circulation of the draft environmental document, it was determined that additional area beyond the original environmental study limits would be required

for the relocation of overhead electrical utilities, minor grading for drainage, and traffic staging during construction. The expanded environmental study limits are depicted in Exhibit 5. The additional area was evaluated to determine if its inclusion in the project would affect new environmental factors or result in a significant adverse effect upon the environment. Based on a review of resource databases, consultation with resource agency personnel, and field surveys, it was determined that inclusion of the additional area would not affect new environmental factors or result in a significant adverse effect upon the environment.

1.4 Alternatives

Project alternatives were developed based upon preliminary environmental and engineering studies, public input, and a value analysis study. Value analysis is defined by Caltrans as "the process used to improve the quality and reduce the cost of transportation projects and other Caltrans programs." Four project alternatives were generated by a Value Analysis team. Three of the alternatives were carried forward and one alternative, Alternative C, was eliminated from further consideration because it did not fully address the project purpose and need. However, since the eliminated alternative offered the potential to avoid and/or minimize use of the Spanish Creek Bridge and the Feather River Highway Historic District, it was included in the Section 4(f) Evaluation in Appendix B of this document.

Based on an evaluation of environmental impacts, consideration of public input, and approval of the Final EIR/EA, Caltrans has identified Alternative B (Build New Bridge and Remove Existing Bridge) as the preferred alternative. Alternative B provides a modern, low maintenance bridge with standard shoulder width. The bridge would accommodate interregional transportation needs, including large permit loads. Traffic could remain on the existing bridge during construction of the replacement bridge, thereby reducing the level of traffic control and conflicts with construction activities. Removal of the existing bridge following construction of the new bridge would eliminate costs associated with the maintenance and monitoring of the deteriorating structure, including lead paint issues.

Following is a summary of the project alternatives that were considered:

1.4.1 Alternative B (Build New Bridge and Remove Existing Bridge)Preferred Alternative

Alternative B proposes construction of a new bridge and removal of the existing bridge. The proposed bridge would be an open-spandrel arch concrete box girder bridge situated immediately west of and parallel with the existing bridge. Alternative B satisfies the purpose and need criteria and provides a new bridge that is

compatible with the historic and scenic attributes of the Feather River highway corridor.

Construction of a replacement bridge on a new alignment would simplify construction because traffic would be able to remain on the existing bridge until construction of the new bridge was completed. Removal of the existing bridge would eliminate costs associated with rehabilitation and maintenance, reduce the safety hazards associated with routine maintenance, eliminate potential hazardous waste issues involved with maintenance of the paint system that protects the metal structure, and most importantly, it would address the planned disposition of the existing bridge, which is becoming progressively less stable.

1.4.2 Alternative A (Build New Bridge and Seismic Retrofit Existing Bridge)

Alternative A entails construction of a new bridge and seismic retrofit of the existing bridge. The new bridge would be situated west of and parallel to the existing bridge. Seismically retrofitting the existing bridge would not address the fatigue critical condition of the structural steel, therefore, only bicyclists and pedestrians would be allowed on the existing bridge. This alternative satisfies the purpose and need criteria because it includes construction of a new bridge. Alternative A would be the environmentally superior build alternative because the existing bridge and highway alignment could be preserved to some extent. Everything else being equal, alternative B proposes removal of the old bridge and obliteration of the adjoining sections of highway.

1.4.3 Alternative D (No Build)

The “no build” alternative assumes that the existing bridge would be maintained and substantial improvements would not be made. The structural integrity of the bridge would continue to deteriorate and permit loads would continue to be limited due to the width and weight capacity of the bridge. Bridge maintenance costs would increase and the structural integrity of the bridge would continue to decline, leading to a future bridge rehabilitation or replacement project.

1.5 Alternatives Considered but Eliminated from Further Discussion Prior to Draft Environmental Document

1.5.1 Alternative C (Rehabilitate Existing Bridge)

Alternative C would entail rehabilitation of the existing structure to increase the load bearing capacity and meet current seismic standards. The work would include foundation strengthening, steel member strengthening, bearing replacement, deck

replacement, rail replacement, and painting. It was estimated that this work would extend the service life of the structure up to 25 years, after which time another major rehabilitation project would be necessary.

This alternative was eliminated from further consideration because the seismic retrofit and strengthening would not address the fatigued steel and the bridge would remain fracture critical. In addition, the bridge would still lack standard shoulder width. Rehabilitation of the bridge would be difficult due to the nonstandard shoulder widths. Traffic and construction delays would occur due to the limited width, which in turn would result in higher construction and user delay costs. Rehabilitation of the structure also requires maintenance of the paint system, which contains lead paint.

An option to rehabilitate the bridge and widen the deck to obtain standard eight-foot wide shoulders and accommodate wide permit loads was also evaluated by Caltrans' Office of Structure Design. However, this option was not considered feasible due to various factors. Widening would require replacement of the floor beams and other parts of the deck system, which would require complete closure of the bridge during construction. Replacing the floor beams would also raise the profile of the bridge. The existing trusses have deficiencies with the current loads and therefore would not be adequate for the additional loading of a wider deck. It is likely that additional trusses and support towers would be required to carry the additional load. This work would affect the visual appearance of the bridge to the extent that the historical integrity would be adversely affected. Given the problems associated with widening, it was determined that widening is not a feasible alternative.

1.6 Permits and Approvals

- California Department of Fish and Game, Region 2 - Streambed Alteration Agreement pursuant to Section 1602 of the Fish and Game code
- United States Army Corps of Engineers, Sacramento District – Department of the Army permit pursuant to Section 404 of the Clean Water Act
- Regional Water Quality Control Board, Central Valley Region - Water Quality Certification pursuant to Section 401 of the Clean Water Act
- State Office of Historic Preservation - Consultation regarding National Register eligibility, Finding of Effects, and mitigation of adverse effects
- U.S. Department of Agriculture, Plumas National Forest - Consultation regarding NEPA compliance and temporary and permanent easements on forest land.

Chapter 2 Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

This Chapter explains the impacts that the project would have on the human, physical, and biological environments in the project area. It describes the existing environment that could be affected by the project and potential impacts from each of the alternatives.

As part of the scoping and environmental analysis conducted for the project, the following environmental factors were considered, but no adverse impacts were identified. Consequently, there is no further discussion regarding these issues in this document: Noise, Growth Inducement, Population and Housing, Public Services, Agriculture, and Geology.

2.1 Cultural Resources

"Cultural Resources" as used in this document refers to all historical and archaeological resources, regardless of significance. Laws and regulations dealing with cultural resources include:

The National Historic Preservation Act of 1966, as amended, (NHPA) sets national policy and procedures regarding historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for the National Register of Historic Places (National Register). Section 106 of NHPA requires federal agencies to take into account the effects of their undertakings on such properties and to allow the Advisory Council on Historic Preservation the opportunity to comment on those undertakings, following regulations issued by the Advisory Council on Historic Preservation (36 CFR 800). On January 1, 2004, a Section 106 Programmatic Agreement (PA) among the Advisory Council, FHWA, State Historic Preservation Officer (SHPO), and Caltrans went into effect for Caltrans projects, both state and local, with FHWA involvement. The PA implements the Advisory Council's regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to Caltrans. The FHWA's responsibilities under the PA have been assigned to Caltrans as part of the Surface Transportation Project Delivery Pilot Program (23 CFR 773) (July 1, 2007).

Historic properties may also be covered under Section 4(f) of the U.S. Department of Transportation Act, which regulates the "use" of land from historic properties. See Appendix B of this document for specific information regarding Section 4(f).

Historical resources are considered under the CEQA, as well as California Public Resources Code (PRC) Section 5024.1, which established the California Register of Historical Resources. PRC Section 5024 requires state agencies to identify and protect state-owned resources that meet National Register of Historic Places listing criteria. It further specifically requires Caltrans to inventory state-owned structures in its rights-of-way. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the SHPO before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the National Register or are registered or eligible for registration as California Historical Landmarks.

The Feather River Highway Historic District, a section of SR 70, was determined eligible for the National Register through the consensus process on April 16, 1987 under Criteria A and C. The district comprises the width of the highway right-of-way over a distance of some 48 miles between Jarbo Gap in Butte County and Keddie in Plumas County. Contributing elements include the overall length and width of the highway, cuts and fills, bridges and tunnels, stone masonry walls and parapets, stone masonry drinking fountains, and culverts.

The Spanish Creek Bridge was determined individually eligible for the National Register on January 9, 1986, as one component of the Historic Truss Bridges of California Thematic Determination of Eligibility under Criterion A. The Spanish Creek Bridge (Brg. No. 09-0015) is a riveted steel deck truss carried on tall K-truss tower piers; its main spans are 142 feet long. Designed by the Bridge Department of the California Division of Highways and built in 1932, the bridge carries SR 70 highway above Spanish Creek. This bridge is significant primarily as a historical transportation link, serving one of the major crossings on SR 70. It also is a contributive element of the Feather River Highway Historic District.

Portions of a historic water ditch and wagon road are also located within the project limits. The Maxwell Ditch is a water conveyance system associated with a hydraulic gold mine. The Utah Construction Road is a wagon road constructed by the Western Pacific Railroad to support construction of the railroad. The Maxwell Ditch stretches miles beyond the project limits, as does the Utah Construction Road, portions of which may also exist in Nevada and Utah. Due to the length of these resources in relation to the segments present within the limits of the bridge project, formal evaluation for eligibility to the National Register is beyond the scope of the bridge project. Therefore, for purposes of the bridge project, Caltrans has assumed that

both resources are eligible for the National Register and that they will be adversely affected by the project. SHPO and ACHP correspondence and an approved Memorandum of Agreement to resolve adverse effects are included in Appendix G.

2.1.1 Impacts

Alternatives A and B propose construction of a new bridge immediately west of and parallel to the existing structure. A portion of SR 70 adjoining each end of the bridge would be realigned to conform to the new bridge alignment. Alternative A proposes seismically retrofitting the existing bridge and preserving it for pedestrian and bicycle use. Alternative B proposes demolition of the existing bridge. Both alternatives would result in a finding of adverse effect to the Spanish Creek Bridge, Feather River Highway Historic District, Maxwell Ditch segment, and Utah Construction Road segment. Implementation of either alternative would also result in a "use" of these historic properties per Section 4(f) guidelines. The Section 4(f) Evaluation is contained in Appendix B.

If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.

If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact Caltrans' District 2 Environmental Branch so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

2.1.2 Avoidance, Minimization, and/or Mitigation Measures

Avoidance of adverse effects upon historical resources is attainable only with Alternative D, the No Build Alternative. Even then, over time, deterioration would have detrimental effects upon the bridge and the highway historic district. Impacts to the bridge and highway historic district would be minimized with the implementation of Alternative A since the bridge would not be removed.

Caltrans has entered into an MOA with the SHPO, which takes into account the project's effects on historic properties and specifies mitigation to be completed by Caltrans. Caltrans will prepare a permanent record of the Spanish Creek Bridge in

accordance with Historic American Engineering Record (HAER) procedures and guidelines. In addition, interpretive panels will be installed within the entrance to the Spanish Creek Campground adjacent to SR 70 depicting the history of the Feather River Highway Historic District and the Spanish Creek Bridge as they reflect the transportation history of the Feather River Canyon. Other similarly mounted panels shall depict the history of other historic properties within and near the APE, including the Maxwell Ditch, the former Western Pacific Railroad, and the Utah Construction Road and other abandoned roadways.

2.2 Land Use and Planning

2.2.1 Existing and Future Land Use

SR 70 in the project vicinity is a two-lane highway located by easement within the PNF, Mount Hough Ranger District. Surrounding land use is designated as multi-use recreational, which allows public access for various recreational activities and permitted activities such as hiking, fishing, boating, camping, gold mining and timber harvesting. The Spanish Creek Campground is located at the northwest quadrant of the Spanish Creek Bridge.

A Pacific Gas & Electric substation is located near the northeast quadrant of the bridge. Union Pacific Railroad facilities are located adjacent to the eastern and southern limits of the project site.

2.2.1.1 Impacts

Implementation of Alternatives A and B would place a new bridge approximately 40 feet west, measured centerline to centerline, of the existing bridge, which would require shifting the adjoining sections of the highway westerly. The campground entrance would be shifted westerly also. A total of approximately 3.04 acres of new highway right-of-way would be required, comprised of 2.98 acres from PNF and 0.06 acre from the Union Pacific Railroad. Union Pacific Railroad infrastructure and operations would not be affected by the potential right of way acquisition.

2.2.1.2 Avoidance, Minimization, and/or Mitigation Measures

Alternative D, the No Build alternative, would avoid impacting the Spanish Creek Campground entrance and the need to acquire new highway right of way from PNF and the Union Pacific Railroad. If Alternative A or B were implemented, the Spanish Creek Campground entrance would be completely reconstructed on the new highway alignment. Caltrans would ensure that the campground entrance is constructed in accordance with modern highway design standards and that it meets the needs of PNF.

2.2.2 Parks and Recreation

SR 70 within the project limits traverses PNF Land. The Spanish Creek Campground and surrounding recreation land, which is administered by PNF, is located on the west side of the Spanish Creek Bridge. The entrance to the campground is located at the northwest quadrant of the bridge. The campground accepts reservations and is in operation from Memorial Day weekend to Labor Day weekend. The campground has 20 campsites, vault toilets, potable water, day-use parking, and a campground host.

Spanish Creek is popular for swimming, boating and trout fishing. Several contiguous placer gold mining claims are located within the project limits on Spanish Creek.

2.2.2.1 Impacts

The build alternatives would require use of the Spanish Creek Campground access road and adjacent public recreation land to gain access to the area beneath the existing and proposed bridges. For safety reasons, the campground would be closed for the estimated three-year period required for major bridge construction activities. A Section 4(f) Evaluation is included in Appendix B. This document evaluates potential impacts to the recreation land, including the Spanish Creek Campground, measures to avoid and minimize impacts, and proposed mitigation for unavoidable impacts to the public recreation land.

Access to certain areas within gold mining claims would be restricted during construction. In addition, removal or displacement of materials and placement of permanent structures could occur within the boundaries of the claims.

A section of Spanish Creek, from the bridge to the proposed temporary trestle location downstream, would be closed to recreational activities during construction.

2.2.2.2 Avoidance, Minimization, and/or Mitigation Measures

- If excavations or placement of a permanent structure were required within a mining claim, Caltrans would obtain a Quit Claim Deed for the area needed from the claim holder(s).

- The campground will be closed during construction to protect the safety of the public.

- Within the limits of the campground, construction vehicles and equipment will be confined to the paved roadway unless otherwise directed by the project plans or Caltrans Resident Engineer.

- Construction storage and staging will occur only within those areas designated on the project plans.

- Removal of vegetation will be limited to the extent possible. Mature trees near the campground entrance, as delineated on the project plans, will be preserved.

- Following construction, all disturbed areas within the recreation area will be stabilized with erosion control seeding. Pavement and infrastructure damaged as a result of Caltrans' project will be repaired.

- Boaters would be notified of any stream closures through press releases and signage on the creek, upstream of the work area. A designated portage detour will be provided for boaters passing through the work area. Contractor personnel will guide boaters through the detour. Boaters may experience delays in passing through the work area depending on the work in process.

2.3 Utilities

A pair of Pacific Gas & Electric overhead transmission lines (60KV and 12KV) runs parallel to the west side of SR 70 within the project limits. The utility lines cross SR 70 near the entrance to the Spanish Creek Campground to the west side of the highway and then run parallel to the highway in each direction. An electrical substation is located on the west side of SR 70 opposite the Spanish Creek Campground entrance. Telephone service may also be located on the same utility poles.

Public Utilities Commission (PUC) General Order 131-D, dated August 11, 1995, requires special review and permitting for relocations of privately owned power lines operating at voltages in excess of 50kV. The relocation of the 60kV overhead lines within the limits of the Spanish Creek Bridge project qualifies for an exemption pursuant to Section III.B.1(c) of PUC General Order 131-D because the relocation is less than 2,000 linear feet.

In addition to the electrical utility, a domestic water well for the Spanish Creek Campground is located adjacent to SR 70 and the campground entrance. The well head will be protected during construction.

2.3.1 Impacts

Bridge construction and demolition operations would require a large crane operating from each end of the existing and new bridges. The crane's boom would require a 300 foot radius operating clearance at each end of the existing and new bridges. This would require relocation of approximately 1,200 feet of existing overhead utility lines that cross SR 70 from the substation and run parallel to the west side of the highway near the campground entrance and the existing bridge. Potential sensitive receptors in the project area include the Spanish Creek Campground. However, the utility lines would be relocated to the opposite side of SR 70, further away from the campground. There are no residences or other sensitive receptors within the project area. The relocation corridor is mostly steep terrain on PNF land. Therefore, the proposed relocation will have no effect on sensitive receptors.

The utility relocation will entail installation of seven new poles and approximately 1,860 feet of transmission line. A forty foot wide swath of vegetation will be cleared beneath the pole line, twenty feet each side of pole centerline. In addition, approximately 18 hazard trees outside of the forty foot corridor will need to be removed. These trees have been identified as hazard trees that could potentially fall on the overhead line. Vegetation removed from the pole line corridor will be chipped except for those areas that are too steep for equipment access, in which case the vegetation will be left on the ground. The seven poles on the former utility alignment will be cut off as close as possible to ground level and the pole butts will remain in place at a depth of approximately eight feet below the ground surface.

2.3.2 Avoidance, Minimization, and/or Mitigation Measures

Any required utility relocation would be performed prior to the beginning of bridge construction. The Spanish Creek Campground water supply well head would be delineated on the plans and protected during construction.

2.4 Visual/Aesthetics

The National Environmental Policy Act of 1969, as amended, establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings [42 United States Code 4331(b)(2)].

Likewise, the California Environmental Quality Act establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of aesthetic, natural, scenic, and historic environmental qualities." [California Public Resources Code Section 21001(b)]

SR 70 is a designated National Scenic Byway from 10 miles north of Oroville to its terminus at U.S. Route 395 in Lassen County. The project is located in mountainous terrain, heavily forested with conifers and oaks. Views are confined to the immediate hills and steep terrain surrounding Spanish Creek. The highway is approximately 140 feet above the creek. Two separate sections of Union Pacific Railroad tracks are visible at the southeast and southwest limits of the project. A public campground and recreation area administered by PNF abuts the northwest end of the Spanish Creek Bridge.

Due to the steep forested terrain and the straight alignment of the bridge, motorists do not have a view of the bridge's steel superstructure, which is painted green. As previously discussed, the bridge is determined eligible for the National Register of Historic Places. Vantage points for viewing the superstructure are accessible from the adjacent campground.

2.4.1 Impacts

Implementation of any of the build alternatives would result in the disturbance of approximately 10.1 acres, which includes temporary staging areas, access roads, and realignment of the highway. Large conifers would be removed from the area southwest of the bridge to make a temporary construction access road parallel to Spanish Creek. This land is prescribed for public recreation by PNF and is partially visible from within the Spanish Creek Campground. Additional conifers and oaks would be removed from PNF land adjacent to the west side of SR 70 due to the necessary shift in the highway alignment. If Alternative B is selected, the project would result in the removal of the historic bridge.

2.4.2 Avoidance, Minimization, and/or Mitigation Measures

Selected trees within proposed temporary staging areas and upon access roads would be marked for preservation by avoidance. The selection of trees would be based upon factors such as aesthetics, ability to avoid (constructability), and age of tree. Woody vegetation would be replaced on PNF lands either by Caltrans or by PNF with funding provided by Caltrans. A new road connection and signage would be installed at the entrance to the Spanish Creek Campground.

Abandoned sections of highway would be obliterated, graded, and restored with native vegetation. Planting of woody vegetation would not occur within the clear recovery zone of the highway, which is 20 feet from the edge of the traveled way.

The proposed bridge type for the build alternatives is an open-spandrel arch concrete box girder bridge. This type of bridge, reminiscent of early bridges in the

region, is an aesthetically pleasing structure that fits the scenic and historic character of the Feather River highway corridor.

2.5 Water Quality and Storm Water Runoff

The project is located on Spanish Creek, within the Feather River watershed, in the Sacramento River Drainage Basin. The project is approximately 3.3 miles upstream of the confluence of Indian Creek and the East Branch of the North Fork Feather River.

The primary federal law regulating water quality is the Clean Water Act. Section 401 of the Act requires a water quality certification from the State Water Resources Control Board (SWRCB) or the Regional Water Quality Control Board (RWQCB) when a project: 1) requires a federal license or permit (a Section 404 permit from the U.S. Army Corps of Engineers is the most common federal permit for Caltrans projects), and 2) will result in a discharge to waters of the United States.

Section 402 of the Act establishes the National Pollutant Discharge Elimination System (NPDES) permit system for the discharge of any pollutant (except dredge or fill material) into waters of the United States. To ensure compliance with Clean Water Act Section 402 the SWRCB has issued a NPDES Statewide Storm Water Permit to regulate storm water discharges from Caltrans facilities both during and after construction, as well as from existing facilities and operations. The Statewide Storm Water Permit requires Caltrans to comply with the requirements of the General Construction Permit issued by the SWRCB to regulate discharges from construction activities which includes clearing, grading, disturbance to the ground, such as stockpiling or excavation, that results in soil disturbances of at least one acre of total land area. Construction activity that results in soil disturbances of less than one acre is subject to the General Construction Permit if the construction activity is part of a larger common plan of development that encompasses one or more acres of soil disturbance, or if there is significant water quality impairment resulting from the activity. The Statewide Storm Water Permit requires development of a Storm Water Pollution Prevention Plan (SWPPP) to address water pollution control. The SWPPP is prepared by the contractor and is subject to Caltrans' approval. The SWPPP identifies construction activities that may cause pollutants in storm water and the temporary best management practices (BMPs) that will be utilized to control these pollutants.

Additional laws regulating water quality include the Porter-Cologne Water Quality Act, Safe Drinking Water Act and Pollution Prevention Act. State water quality laws

are codified in the California Water Code, Health and Safety Code, and Fish and Game Code Sections 5650-5656.

2.5.1 Impacts

The primary constituent of concern for the build alternatives would be sediment, both during and after construction. During construction there could be temporary adverse impacts due to increased erosion that could eventually be transported into storm drains and receiving waters. After construction, newly planted cut and fill slopes would have the potential for sediment transport from slope rills and slumps if not properly maintained.

The proposed work would disturb a total of approximately 10.1 acres. Earth disturbing activities would include realignment of a section of SR 70 to conform with the new bridge, reconstruction of a portion of the campground entrance road, excavations for bridge foundations, creation of temporary construction staging/storage areas in upland areas, and construction of temporary access roads for construction, including construction of multiple temporary stream crossings. These activities would have the potential to create areas of unstable soils, which are subject to erosion. Soil erosion can result in the transport of sediment into surface waters and turbidity.

Construction of a new bridge and demolition of the existing bridge (Alternative B) would result in temporary impacts within Spanish Creek. Temporary impacts would result from the removal of riparian vegetation, stream bank modifications for access into the stream channel, stream diversions and/or dewatering of the work area, construction of temporary stream crossing structures, and the placement of fill within the stream channel to create a temporary work pad. These impacts could result in increases in turbidity and suspension of solids. Additionally, the existing bridge is known to contain lead paint. Demolition of the existing bridge could introduce lead containing paint chips into Spanish Creek.

Downstream on Spanish Creek within the lower reach of the Spanish Creek Campground, a temporary trestle would be installed to provide access to the opposite side of the creek. It is likely that the trestle would be supported by steel piles.

Upstream beneath the bridge, stream diversions and a work pad consisting of clean cobbles would be necessary for bridge construction and demolition. It is likely that culverts would be placed beneath the cobble pad to maintain the stream flow. In addition to providing a level work platform, the cobble work pads would provide a foundation for falsework erection and an area upon which to collapse the old bridge.

Falsework is a temporary structure comprised of wood and/or steel which supports the bridge while it is under construction. The vertical support members of the falsework system would be driven into the streambed. Construction of the temporary work pad would result in the placement of fill temporarily upon approximately 0.3 acre of stream channel. All construction materials would be removed from the streambed following construction except for the bottom layer of the cobble pad that would likely be spread evenly throughout the channel.

The new bridge drainage system would be similar to that of the existing bridge. The bridge would have scuppers or down drains to remove storm water from the traveled way to prevent accumulations and/or freezing of water. The storm water would be discharged beneath the bridge directly to upland areas or within the creek channel. The volume of storm water would be increased slightly due to an increase in bridge width. As with the existing bridge, highway storm water runoff from the bridge may contain traction sand, de-icing agents and other contaminants typically found on the highway.

Realignment of the adjoining sections of highway to conform with a new bridge alignment would require reconstruction of the highway drainage system. The slight increase in impervious pavement and new cut and fill slopes would result in concentrated water flows.

The “no build” alternative would result in increased potential for the introduction of lead containing paint into the environment due to the aging paint system and the increasing need for maintenance on the structure.

2.5.2 Avoidance, Minimization, and/or Mitigation Measures

The contractor would be required to prepare a SWPPP, which would identify potential sources of pollution related to construction and temporary BMPs that would be implemented to protect water quality. The SWPPP must be approved by the Resident Engineer and would include appropriate temporary construction BMPs to address soil stabilization, sediment control, wind erosion control, tracking control, non-storm water management, and waste management.

It is proposed to include the following BMPs in the project plans if one of the build alternatives is approved:

- Cut and fill slopes shall receive a hydro-seed application of mulch, stabilizing emulsion, fertilizer, and seed and tree planting to provide a vegetated surface to a minimum of 70 percent background native vegetation or equivalent;

- Asphalt dikes and overside drains with rock energy dissipaters will be installed in areas of concentrated flows near fill slopes;
- Drainage conveyance systems will be designed with consideration of downstream effects;
- Drainage culverts will be designed with flared end sections and outlet protection/velocity dissipation devices;
- Traction sand devices will be installed where feasible to collect traction sand;
- Where feasible, storm water runoff will be designed to sheet flow over vegetated fill slopes for bio-filtration.

The contractor would be required to adhere to Caltrans' standard specifications and special provisions pertaining to water quality. The standard specifications pertaining to water quality include dust control, clearing and grubbing, earthwork, erosion control, and water pollution. In addition, the contractor would be required to comply with the terms and conditions of regulatory permits issued by the Department of Fish & Game, the Regional Water Quality Control Board, and the Army Corps of Engineers. Appropriate regulatory guidelines would be followed for any dewatering, and if required, siphoning operations within live streams.

Implementation of the above BMPs and adherence to Caltrans' contract plans, specifications and special provisions, including regulatory permit conditions, would minimize the potential for water quality impacts. The BMPs referred to in this section were erroneously referred to in the Draft EIR/EA as "mitigation measures", which upon implementation and adherence to contract specifications and regulatory permits, would "ensure that water quality impacts were reduced to a level below significance with respect to CEQA". This error was carried forward to the California Environmental Quality Act Evaluation checklist in Appendix A, Hydrology and Water Quality Section (a), and Appendix B, Summary of Avoidance, Minimization, and/or Mitigation Measures. A Water Quality Assessment Report, which substantiates that potential water quality impacts resulting from the project would be less than significant, was prepared on August 21, 2006. Based on the Water Quality Assessment Report, the respective sections of the Final EIR/EA have been updated to correct the erroneous information.

2.6 Hazardous Waste

Hazardous materials and hazardous wastes are regulated by many state and federal laws. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health, and land use.

The primary federal laws regulating hazardous wastes/materials are the Resource Conservation and Recovery Act of 1976 (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). The purpose of CERCLA, often referred to as Superfund, is to clean up contaminated sites so that public health and welfare are not compromised. RCRA provides for "cradle to grave" regulation of hazardous wastes. Other federal laws include:

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety & Health Act (OSHA)
- Atomic Energy Act
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

In addition to the acts listed above, Executive Order 12088, Federal Compliance with Pollution Control, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

Hazardous waste in California is regulated primarily under the authority of the federal Resource Conservation and Recovery Act of 1976, and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning.

Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper management of hazardous material is vital if it is disturbed during project construction

2.6.1 Impacts

An Initial Site Assessment (ISA) was performed to determine if potential sources of hazardous waste exist within the project limits. The ISA entailed a review of hazardous waste databases, as-built plan sheets, and a site visit. It was determined that the project site is not listed on the April 1998 State List of Hazardous Waste Sites, also referred to as the "Cortese List." The following potential hazardous waste issues were identified during the ISA:

- Lead Containing Paint (LCP)
- Asbestos Containing Materials (ACM)

Lead Containing Paint

Lead was a common ingredient of paints manufactured before 1978 and is still an ingredient of some industrial paints. Caltrans Structures Maintenance personnel reported that the original paint system on the Spanish Creek Bridge was lead based primer and paint. Paint samples taken form the bridge truss and girder system during a site investigation confirmed the presence of lead containing paint. Soils beneath the bridge were also sampled for lead, to a maximum depth of two feet, due to historical bridge maintenance activities including sandblasting and repainting operations. Test results indicate lead levels above regulatory hazardous waste thresholds in the area beneath and adjacent to the existing bridge, including proposed highway Alignment 2.

Traffic striping paint and thermoplastic striping present on the road surface may contain heavy metals, including lead. When the striping is removed exclusive of the asphalt concrete by grinding or abrasive blasting, the residue may contain high concentrations of heavy metals.

Asbestos Containing Material

ACM has been commonly used in bearing pads and joint filler material for bridge abutment and expansion joints. A site investigation detected no ACM on the bridge. However, not all areas of the bridge may be accessible for sampling and therefore the investigation cannot conclusively report an absence of ACM.

2.6.2 Avoidance, Minimization, and/or Mitigation Measures

All paints on the bridge should be treated as lead-containing for purposes of determining the applicability of the Cal/OSHA lead standard during any bridge maintenance, renovation or demolition activity.

The contractor shall prepare a project specific lead compliance plan in accordance with the Cal/OSHA lead standard (CCR Title 8, Section 1532.1) to prevent or minimize worker exposure to lead. The plan should include protocols for environmental and personnel monitoring, requirements for personal protective equipment, and other health and safety protocols and procedures for the handling of lead containing materials. In addition, the contactor is responsible for characterizing and segregating wastes prior to disposal.

Excavated soils in the vicinity of the existing bridge should either be 1) managed and disposed of as a California hazardous waste or, 2) stockpiled separately and re-sampled to confirm total and soluble lead concentrations for disposal and/or reuse evaluation.

Traffic striping paint and/or thermoplastic striping removed from the road surface, exclusive of the asphalt concrete, by grinding or abrasive blasting shall be managed and disposed of as a California hazardous waste.

Written notification to U.S. Environmental Protection Agency, Region 9, and the California Air Resources Board is required ten working days prior to commencement of any bridge renovation or demolition activity regardless of whether or not ACM is present. If previously undetected ACM is discovered during construction, compliance with Cal/OSHA regulations pertaining to ACM must be followed.

2.7 Air Quality

The Clean Air Act as amended in 1990 is the federal law that governs air quality. Its state counterpart is the California Clean Air Act of 1988. These laws set standards for the quantity of pollutants that can be in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). Standards have been established for six criteria pollutants that have been linked to potential health concerns; the criteria pollutants are: carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM), lead (Pb), and sulfur dioxide (SO_2).

Under the 1990 Clean Air act Amendments, the U.S. Department of Transportation cannot fund, authorize, or approve Federal actions to support programs or projects that are not first found to conform to the State Implementation Plan for achieving the goals of the Clean Air Act requirements. Conformity with the Clean Air Act takes place on two levels – first, at the regional level and second, at the project level. The proposed project must conform at both levels to be approved.

Regional level conformity in California is concerned with how well the region is meeting the standards set for carbon monoxide (CO), nitrogen Dioxide (NO_2), ozone

(O_3), and particulate matter (PM). California is in attainment for the other criteria pollutants. At the regional level, Regional Transportation Plans (RTP) are developed that include all of the transportation projects planned for a region over a period of years, usually at least 20. Based on the projects included in the RTP, an air quality model is run to determine whether or not the implementation of those projects would conform to emission budgets or other tests showing that attainment requirements of the Clean Air Act are met. If the conformity analysis is successful, the appropriate regional planning organization and federal agencies make the determination that the RTP is in conformity with the State Implementation Plan for achieving the goals of the Clean Air Act. Otherwise, the project in the RTP must be modified until conformity is attained. If the design and scope of the proposed transportation project are the same as described in the RTP, then the proposed project is deemed to meet regional conformity requirements for purposes of project-level analysis.

Conformity at the project-level also requires "hot spot" analysis if an area is "non-attainment" or "maintenance" for carbon monoxide (CO) and/or particulate matter. A region is a "non-attainment" area if one or more monitoring stations in the region fail to attain the relevant standard. Areas that were previously designated as non-attainment areas but have recently met the standard are called "maintenance" areas. "Hot spot" analysis is essentially the same, for technical purposes, as CO or particulate matter analysis performed for NEPA and CEQA purposes. Conformity does include some specific standards for projects that require a hot spot analysis. In general, projects must not cause the CO standard to be violated, and in "non-attainment" areas the project must not cause any increase in the number and severity of violations. If a known CO or particulate matter violation is located in the project vicinity, the project must include measures to reduce or eliminate the existing violation(s) as well.

2.7.1 Impacts

The proposed project is exempt from all air quality conformity analysis requirements per Table 2 of 40 Code of Federal Regulations (CFR) §93.126, Subsection "Safety, widening narrow pavements or reconstructing bridges (no additional lanes)."

The project may result in the generation of short-term construction related air emissions, including fugitive dust and exhaust emissions from construction equipment. Fugitive dust, sometimes referred to as PM10, would be the primary short-term construction impact. Fugitive dust may be generated during excavation and grading, hauling, and demolition activities. Both fugitive dust and construction equipment exhaust emissions would be temporary and transitory in nature.

2.7.2 Avoidance, Minimization, and/or Mitigation Measures

The contractor is required to comply with Caltrans' Standard Specifications, which include Section 7-1.01F "Air Pollution Control" and Section 10 "Dust Control." In addition, the U.S. Environmental Protection Agency's National Emissions Standards for Hazardous Air Pollutants (NESHAP) and the California Air Resources Control Board (CARB) rules require the contractor to notify the CARB in writing prior to the demolition or renovation of a bridge.

2.8 Wetlands and Other Waters

Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Clean Water Act (33 U.S.C. 1344) is the primary law regulating wetlands and waters. The Clean Water Act regulates the discharge of dredged or fill material into waters of the United States, including wetlands. Waters of the United States include navigable waters, interstate waters, territorial seas and other waters that may be used in interstate or foreign commerce. To classify wetlands for the purposes of the Clean Water Act, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils subject to saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the Clean Water Act.

Section 404 of the Clean Water Act establishes a regulatory program that provides that no discharge of dredged or fill material can be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (ACOE) with oversight by the Environmental Protection Agency (EPA).

The Executive Order for the Protection of Wetlands (E.O. 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, this executive order states that a federal agency, such as the Federal Highway Administration, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: 1) that there is no practicable alternative to the construction and 2) the proposed project includes all practicable measures to minimize harm.

At the state level, wetlands and waters are regulated primarily by the Department of Fish and Game (CDFG) and the Regional Water Quality Control Boards (RWQCB). In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission) may also be involved. Sections 1600-1607 of the Fish

and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFG before beginning construction. If CDFG determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFG jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the ACOE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFG.

The Regional Water Quality Control Boards were established under the Porter-Cologne Water Quality Control Act to oversee water quality. The RWQCB also issues water quality certifications in compliance with Section 401 of the Clean Water Act. Please see the Water Quality section for additional details.

2.8.1 Impacts

Spanish Creek, a perennial stream, is the primary surface water within the project study limits. The proposed project will not result in the placement of permanent structures or fill within the banks of Spanish Creek. However, temporary stream diversions and crossings will be necessary to facilitate construction access and staging operations. A description of these anticipated impacts are described in Section 2.5.1 of this document. Implementation of any of the project alternatives, except the “No Build” alternative, would require the removal of approximately 0.7 acre of riparian vegetation from the banks of Spanish Creek to facilitate construction access and staging.

In addition to Spanish Creek, there is a total of approximately 0.1 acre of palustrine emergent wetlands within the project study limits. The wetlands are situated on the north and south banks of Spanish Creek. The majority of wetlands are located outside of the proposed work area. Approximately 0.05 acre of wetlands are located in the vicinity of the proposed temporary trestle that will be used to cross Spanish Creek from within the Spanish Creek Campground. There is a wetland on the northern bank of Spanish Creek that is 2,067 square feet and a wetland on the southern bank that is 178 square feet. The trestle will span both of these wetlands in order to avoid an impact. No direct or indirect effects to wetlands will occur as a result of the proposed project.

2.8.2 Avoidance, Minimization, and/or Mitigation Measures

Measures to avoid and minimize impacts to riparian vegetation on the banks of Spanish Creek are discussed in Section 2.9.2 of this document.

All wetlands identified within the limits of the project will be avoided. The proposed temporary stream crossing trestle will be strategically designed and placed to avoid direct or indirect effects to wetlands. Temporary ESA fencing will be installed at each location where wetlands are present to avoid inadvertent impacts during construction. The contractor will be required to install the temporary ESA fencing as the first order of work.

2.9 Fish and Wildlife

Wildlife surveys within Spanish Creek indicate the presence of various fish species including rainbow and brown trout, Sacramento sucker, and Sacramento pike minnow. Crayfish, bullfrogs and freshwater mussels were also noted. The creek corridor also provides nesting and foraging habitat for a variety of birds and terrestrial animals. No listed sensitive, threatened, or endangered species were identified within the project limits.

2.9.1 Impacts

With the implementation of any of the build alternatives, temporary stream encroachments would include pile driving, water diversions, and placement of temporary structures to facilitate bridge construction. Temporary diversions and placement of fill would be necessary in the vicinity of the bridge to create a temporary work pad. Riparian vegetation would be removed from the stream bank at this location. Construction of the temporary trestle downstream would require pile driving to install the vertical supports for the trestle deck.

2.9.2 Avoidance, Minimization, and/or Mitigation Measures

Any stream diversion, dewatering, or siphoning operation would be performed in accordance with all regulatory permit conditions and applicable resource agency guidelines. During work within the creek channel, aquatic passage and stream continuity would be maintained at all times.

The removal of trees and riparian vegetation would be restricted to the period of September 15 through March 30 to avoid impacts to nesting migratory birds. If vegetation removal were required outside of this period, a qualified biologist would conduct a nesting survey prior to the removal.

2.10 Vegetation

The natural plant community in the project area is Sierran mixed conifer forest and montane riparian. Species observed within the project limits include Douglas fir, black oak, incense cedar, alder, deerbrush, manzanita, dogwood, western poison oak, sword fern, mountain mule ears, lupine, and California wild grape.

2.10.1 Impacts

Vegetation removal would be necessary to facilitate construction of any of the build alternatives. Vegetation would be removed within the footprint of the new bridge alignment, new sections of adjoining roadway, construction access roads, and the construction staging and storage areas. The total estimated area of vegetation removal required for construction would be approximately 10.1 acres, which includes 0.7 acre of riparian vegetation.

2.10.2 Avoidance, Minimization, and/or Mitigation Measures

The removal of vegetation would be limited to the minimum necessary to accomplish the work. Temporary ESA fencing would be installed at strategic locations to protect upland and riparian vegetation immediately adjacent to the work area from inadvertent impacts. This includes upland trees within staging areas and trees near access roads marked for preservation for aesthetic purposes. Where practicable, riparian vegetation that must be removed temporarily for construction purposes would be trimmed to ground level and covered with gravel to preserve the root system. The root system would provide soil stability and enable the plants to regenerate when they are uncovered following construction. Following construction, willow cuttings and alder seedlings would be replanted within the riparian zone.

Woody vegetation would be replaced on PNF lands either by Caltrans or by PNF with funding provided by Caltrans. Planting of woody vegetation would not occur within the clear recovery zone of the highway, which is approximately 20 feet from the edge of the traveled way.

All disturbed areas would be hydro-seeded with an appropriate erosion control seed mixture upon completion of final grading. In addition, woody vegetation removed during clearing operations would be chipped, stockpiled, and applied to disturbed areas as appropriate.

2.11 Energy

The CEQA Guidelines, Appendix F, Energy Conservation, state that EIRs are required to include a discussion of the potential energy impacts of proposed projects with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

NEPA (42 USC Part 4332) requires the identification of all potentially significant impacts to the environment, including energy impacts.

2.11.1 Impacts

The energy expended to construct the new bridge will be offset by energy savings realized as a result of lower maintenance requirements of the new concrete bridge. The existing steel bridge requires routine structural inspections and painting. Additional energy savings will be realized during construction because of the ability to utilize the existing Spanish Creek Campground road during construction. The campground road will serve as the main access road to the construction site. This will eliminate the need to construct additional access roads soley for the project. Construction, maintenance, and decommissioning of additional access roads would require considerable energy expenditures.

2.11.2 Avoidance, Minimization, and/or Mitigation Measures

The existing bridge cannot accommodate some large permit loads due to lane width and structural limitations for weight loading. Therefore, large permit loads are required to take an alternate route, which increases the distance of the trip. Replacement of the existing bridge with a modern structure will eliminate the need for large trucks with oversize permit loads to travel longer distances due to deficiencies in the transportation system.

2.12 Cumulative Effects

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of this project. A cumulative effects assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor, but collectively substantial impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive types of agricultural cultivation.

These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

CEQA Guidelines, Section 15130, describes when a cumulative impact analysis is warranted and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts, under CEQA, can be found in Section 15355 of the CEQA Guidelines. A definition of cumulative impacts, under NEPA, can be found in 40 CFR, Section 1508.7 of the CEQ Regulations.

Following are recently constructed and reasonably foreseen future projects in the vicinity of the Spanish Creek Bridge and within the Feather River Highway Historic District that may affect like environmental factors.

Previous transportation projects include the rehabilitation and seismic retrofit of the Pulga, Rock Creek, Storrie, Tobin, and Howells bridges on SR 70 in Butte and Plumas counties. This project was completed in 2006. These bridges are contributing elements of the Feather River Highway Historic District. The bridges are also eligible for inclusion in the National Register of Historic Places on their own merit. None of the bridges were adversely affected as a result of the project.

Proposed future transportation projects include 1) the rehabilitation and seismic retrofit or replacement of the Yellow Creek Bridge, and 2) a major project to reconstruct metal beam guardrail (MBGR) and associated earth retaining structures on SR 70 in Plumas County from post mile 0.0 to 33.0.

The Yellow Creek Bridge is seismically deficient, has scour problems at the pier foundation, and has a nonstandard wooden bridge rail with a lead paint finish. A project is being developed to correct these problems. Alternatives may include bridge rehabilitation and seismic retrofit, bridge replacement, or the “no build” alternative, in which case, only bridge maintenance will be performed. The Yellow Creek Bridge is a contributing element of the Feather River Highway Historic District and is eligible for inclusion in the National Register of Historic Places on its own merit. In the immediate vicinity of the Yellow Creek Bridge is the PG&E roadside rest area, the Belden Town Bridge, and the PG&E power generation facility on Yellow Creek. In addition to the bridge work, it is proposed to widen the highway in the vicinity of the bridge to improve highway operations and safety. The widening will

accommodate paved shoulders and turn lanes that meet modern highway design standards.

The MBGR reconstruction project involves replacing worn and defective MBGR and maintenance or new installation of earth retaining structures on a 33 mile section of SR 70. In most cases, the MBGR will be replaced within the footprint of the existing MBGR posts. Additional work being considered to improve safety and operations on SR 70 includes paving between the existing edge of pavement and guardrail when the guardrail is within approximately four feet of the edge of pavement to improve motorist safety and reduce maintenance. In addition, it is proposed to place crumb-crete, a concrete product made with recycled tires, along the base of the MBGR to prevent vegetation growth. This is both a maintenance and fire prevention measure.

Routine highway maintenance work within the Feather River Highway Historic District is ongoing. Due to the rugged terrain and narrow canyon, periodic events such as wild fires, flooding, and landslides cause considerable damage to the highway corridor, as well as the adjacent railroad facilities and Pacific Gas and Electric Company hydro-electric generation facilities. Repairs often result in minor alterations of the environment. For example, flooding in 1997 resulted in the erosion of highway embankments along the banks of the North Fork Feather River. The highway embankments were reconstructed with grouted rock slope protection (RSP) to prevent subsequent erosion and scour problems. Grouted RSP was not present at these locations prior to the storm event. The introduction of grout resulted in a noticeable visual alteration within the highway corridor.

The effects of the proposed project, with implementation of any of the project alternatives, are not cumulatively considerable when viewed in connection with other past, present, and future projects, and land use plans within the Feather River Highway Historic District based on the following:

- Bridge projects are assessed on a case-by-case basis. The previous major bridge rehabilitation and seismic retrofit project included measures to avoid the replacement of any of the structures;

- Proposed mitigation associated with the implementation of Alternative A or B would include preparation of a permanent record of the Spanish Creek Bridge in accordance with Historic American Engineering Record (HAER) procedures and guidelines. In addition, historical resource interpretive panels would be installed at the entrance to the Spanish Creek Campground adjacent to SR 70. The panels would include photographs and information pertaining to the historic bridge, the Feather River Highway Historic District, the Maxwell Ditch, the Utah Construction Road, and the railroad;

- Physical constraints within the Feather River Canyon preclude major alterations or expansion of the highway system.

Chapter 3 California Environmental Quality Act (CEQA) Evaluation

3.1 Determining Significance Under CEQA

The proposed project is a joint project by the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA), and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). FHWA's responsibility for environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C. 327. Caltrans is the lead agency under CEQA and NEPA.

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an EIS, or some lower level of documentation will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) *as a whole* has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

CEQA, on the other hand, does require Caltrans to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of mandatory findings of significance, which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and CEQA significance.

3.2 Less Than Significant Effects of the Proposed Project

The CEQA checklist in Appendix A identifies environmental factors and corresponding project related effects that are less than significant.

3.3 Discussion of Significant Impacts

3.3.1 Significant Environmental Effects of the Proposed Project

The preferred alternative, Alternative B, entails removal of the Spanish Creek Bridge. The Spanish Creek Bridge (Bridge No. 09-0015) has been determined individually eligible for the National Register of Historic Places as one component of the Historic Truss Bridges of California Thematic Determination of Eligibility under Criterion A. It is also eligible for listing in the California Register of Historic Resources. The bridge is significant primarily as a historical transportation link, serving one of the major crossings on SR 70. Removal of the bridge would constitute a substantial adverse change in the significance of the resource and elimination of an important example of a major period of California history.

3.3.2 Unavoidable Significant Environmental Effects

Impacts to the bridge cannot be mitigated to a level of less than significant.

3.3.3 Mitigation Measures for Significant Impacts under CEQA

Mitigation for the removal of the Spanish Creek Bridge (Alternative B) includes the following:

Historical resource interpretive panels will be mounted on a kiosk within the upper limits of the Spanish Creek Campground adjacent to SR 70. The panels will provide information and photographs pertaining to the historic bridge, the Feather River Highway Historic district, the Maxwell Ditch, the Utah Construction Road, and the railroad. In addition, a permanent record of the Spanish Creek Bridge will be prepared in accordance with Historic American Engineering Record (HAER) procedures and guidelines.

3.4 Climate Change

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization's Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to

greenhouse gas[2] (GHG) emissions reduction and climate change research and policy have increased dramatically in recent years. In 2002, with the passage of Assembly Bill 1493 (AB 1493), California launched an innovative and pro-active approach to dealing with GHG emissions and climate change at the state level. AB 1493 requires the Air Resources Board (ARB) to develop and implement regulations to reduce automobile and light truck GHG emissions; these regulations will apply to automobiles and light trucks beginning with the 2009 model year.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to: 1) year 2000 levels by 2010, 2) year 1990 levels by 2020, and 3) 80% below year 1990 levels by 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that ARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state's Climate Action Team.

With Executive Order S-01-07, Governor Schwarzenegger set forth the low carbon fuel standard for California. Under this executive order, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by 2020.

Climate change and GHG reduction is also a concern at the federal level; at this time, no legislation or regulations have been enacted specifically addressing GHG emissions reductions and climate change. However, California, in conjunction with several environmental organizations and several other states, sued to force the U.S. Environmental Protection Agency (EPA) to regulate GHGs as a pollutant under the Clean Air Act (*Massachusetts vs. Environmental Protection Agency et al.,* U.S. Supreme Court No. 05–1120. Argued November 29, 2006—Decided April 2, 2007). The court ruled that GHGs do fit within the Clean Air Act's definition of a pollutant, and that EPA does have the authority to regulate GHGs. Despite the Supreme Court ruling, there are no promulgated federal regulations to date limiting greenhouse gas emissions.

[2] Greenhouse gases related to human activity, as identified in AB 32, include: Carbon dioxide, Methane, Nitrous oxide, Tetrafluoromethane, Hexafluoroethane, Sulfur hexafluoride, HFC-23, HFC-134a*, and HFC-152a*.

3.4.1 Impacts

According to a recent white paper by the Association of Environmental Professionals[3], "an individual project does not generate enough greenhouse gas emissions to significantly influence global climate change. Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of greenhouse gases.

Caltrans and its parent agency, the Business, Transportation, and Housing Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California's GHG emissions are from the burning of fossil fuels and 40 percent of all human made GHG emissions are from transportation, Caltrans has created and is implementing the *Climate Action Program at Caltrans* (December 2006). Transportation's contribution to GHG emissions is dependent on three factors: the types of vehicles on the road, the type of fuel the vehicles use, and the time/distance the vehicles travel.

One of the main strategies in Caltrans' Climate Action Program to reduce GHG emissions is to make California's transportation system more efficient. The highest levels of carbon dioxide from mobile sources, such as automobiles, occur at stop-and-go speeds (0-25 miles per hour) and speeds over 55 mph; the most severe emissions occur from 0-25 miles per hour. Relieving congestion by enhancing operations and improving travel times in high congestion travel corridors will lead to an overall reduction in GHG emissions.

Caltrans recognizes the concern that carbon dioxide emissions raise for climate change. However, accurate modeling of GHG emissions levels, including carbon dioxide at the project level, is not currently possible. No federal, state or regional regulatory agency has provided methodology or criteria for GHG emission and climate change impact analysis. Therefore, Caltrans is unable to provide a scientific or regulatory based conclusion regarding whether the project's contribution to climate change is cumulatively considerable.

3.4.2 Avoidance, Minimization, and/or Mitigation Measures

Caltrans continues to be actively involved on the Governor's Climate Action Team as ARB works to implement AB 1493 and AB 32. As part of the *Climate Action Program at Caltrans* (December 2006), Caltrans is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing

[3] Hendrix, Michael and Wilson, Cori. *Recommendations by the Association of Environmental Professionals (AEP) on How to Analyze Greenhouse Gas Emissions and Global Climate Change in CEQA Documents* (March 5, 2007), p. 2.

proximity, developing transit-oriented communities, and high density housing along transit corridors. Caltrans is working closely with local jurisdictions on planning activities; however, Caltrans does not have local land use planning authority. Caltrans is also supporting efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, light and heavy-duty trucks. However it is important to note that the control of the fuel economy standards is held by the United States Environmental Protection Agency and ARB. Lastly, the use of alternative fuels is also being considered; Caltrans is participating in funding for alternative fuel research at the University of California, Davis.

Chapter 4 Consultation and Coordination

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process to determine the scope of environmental documentation, the level of analysis, potential impacts and mitigation measures, and related environmental requirements. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including project development team meetings, interagency coordination meetings, and public meetings. This chapter addresses Caltrans' efforts to fully identify, address, and resolve project related issues through early and continuing coordination.

A public notice was published in the Feather River Bulletin on January 7, 2004, and January 21, 2004, to inform the public that Caltrans was initiating studies relative to the Spanish Creek Bridge project and that a public information meeting was planned for January 27, 2004, at the Quincy Public Library meeting hall, 445 Jackson Street, in Plumas County. In addition to the newspaper ad, notices were mailed directly to appropriate public agencies, interest groups, and individuals. Project information presented at the meeting included the project purpose and need statement, project alternatives, potential project related impacts, an outline of the project development process, and the project schedule. Comment cards were made available at the meeting and attendees were encouraged to provide input. Less than 10 people attended the meeting. Four written comments were received, none of which raised significant or controversial issues. The written comments and Caltrans' responses are included in Appendix E.

A Notice of Preparation (NOP) for an Environmental Impact Report was advertised in accordance with CEQA Guidelines. The NOP was sent to public agencies with discretionary approval authority and/or jurisdiction over resources held in trust for the public, and other appropriate public agencies, organizations, and individuals with an interest in the project. The purpose of the NOP is to obtain early comments on the proposed project, project alternatives, and potential environmental effects of the project. The only comments received were from the California Regional Water Quality Control Board and the California Department of Forestry and Fire Protection regarding compliance with regulations pertaining to water quality and fire control respectively.

Early coordination with PNF began in 2003 due to the proximity of public recreation land relative to the project and the need to acquire temporary and/or permanent right-of-way on public recreation land. Following is a summary of meetings between Caltrans and PNF during the project development process:

- March 21, 2003 and July 22, 2003 meetings were held at the PNF Mount Hough Ranger District Office near Quincy (Mt. Hough). These initial scoping meetings were attended by Caltrans and PNF staff. The purpose of the meetings was to introduce PNF to the proposed project and schedule, discuss responsibilities and coordination protocol for complying with the NEPA;

- July 20, 2004, meeting at Mt. Hough, attended by Caltrans and PNF. Major points covered in the meeting include the following: PNF considers the public recreation land, including the campground, a "significant" resource in terms of Section 4(f); anticipated level of NEPA compliance and agency roles (Caltrans is the lead agency and PNF is a cooperating agency); project scope and potential impacts relative to public recreation area, and possible measures to minimize impacts upon recreation and campground activities;

- March 15, 2005, meeting at Spanish Creek Bridge (project site), attended by Caltrans and PNF. This meeting was to discuss construction access and staging needs, potential impacts to public recreational area, including the Spanish Creek Campground, and measures to avoid and minimize impacts to the recreation area. PNF would need to decide whether the campground and recreation area would be made available for temporary construction use and what restrictions would apply (e.g., duration of use, period of use by construction, and whether the property would remain open for public use or be closed for the duration of construction);

- March 22, 2005, meeting at Mt. Hough, attended by Caltrans, PNF and FHWA. Caltrans Structures Construction discussed the necessity of utilizing the campground access road and recreation area for construction access and staging. The discussion focused on whether the recreation area and campground should remain open, fully or partially, during construction or whether it should be closed. Also, discussed was Section 4(f) use and possible compensation. PNF indicated no interest in taking ownership of the Spanish Creek Bridge if a new bridge was constructed and the existing bridge was left in place. As a result of this meeting, PNF issued a letter on October 14, 2005 formally notifying Caltrans that PNF desires that the Spanish Creek Campground remain open during construction. The PNF District Ranger recommended "we (PNF) shorten the campground operation from Memorial Day weekend to Labor Day weekend, and allow Caltrans controlled access through the campground while it is open. Controlled access could include traffic control and limited or no work during the weekends and definitely no work during the three major holiday weekends."

- December 13, 2005, meeting at Mt. Hough, attended by Caltrans and PNF. The discussion focused on the construction process and measures to minimize impacts to the public recreation land and campground. Compensation and post-construction restoration of the recreation land was also discussed;

- March 6, 2006, meeting at Mt. Hough, attended by Caltrans and PNF. The discussion focused on measures to minimize impacts to the public recreation area and campground during construction, post-construction restoration of the property, and compensatory mitigation;

- September 7, 2006, meeting at Mt. Hough, attended by Caltrans and PNF. The purpose of the meeting was to discuss proposed compensation for impacts to public recreation land and other Section 4(f) properties, and measures to minimize harm to public recreation lands during construction;

- April 12, 2007, meeting at Mt. Hough, attended by Caltrans and PNF. The purpose of the meeting was to discuss proposed compensation for impacts to public recreation land and other Section 4(f) properties, and measures to minimize harm to public recreation lands during construction. In addition, the draft MOA to resolve adverse effects upon historic properties was delivered to PNF for their review. PNF is a concurring party to the MOA;

- September 12, 2007, meeting at Mt. Hough, attended by Caltrans and PNF. Discussed need for unanticipated overhead utility relocation; requested PNF's delineation of recreation area and campground boundary; and discussed placement of interpretive mitigation feature on PNF land to resolve adverse effects to historic properties.

On February 27, 2008, PNF issued a letter to Caltrans confirming that the public recreation area, which includes the Spanish Creek Campground, is a significant resource in terms of Section 4(f). The letter also confirmed the following: the boundary of the recreation area and campground; the campground will be closed during the three year construction period; measures to minimize harm to the recreation area; impacts to the recreation area which cannot be avoided; and the desired monetary compensation to make PNF whole.

Coordination with PNF has been ongoing with respect to temporary easements, highway right-of-way, and measures to minimize harm to the public recreation area, including the campground. Implementation of the build alternatives would require PNF to approve a series of federal actions on National Forest system lands. A Special Use Permit will be issued to the bridge contractor for use of National Forest

system lands for activities such as staging equipment, building a temporary trestle over Spanish Creek, construction of temporary roads, hauling material and supplies on National Forest lands, etc. A Forest Order(s) would be issued for the temporary closure of the Spanish Campground and for the temporary closure of a section of Spanish Creek in the vicinity of the proposed bridge project.

Caltrans initiated consultation with the SHPO in accordance with the July 2003 Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation. SHPO correspondence and an approved MOA regarding the treatment of historic properties adversely affected by the project are included in Appendix G. Following is a chronology of SHPO consultation:

- Caltrans submitted a letter to the SHPO on December 28, 2005 transmitting a Historic Property Survey Report (HPSR) and requesting SHPO's concurrence regarding Caltrans' determinations of eligibility for listing on the National Register;

- On February 9, 2006, the SHPO submitted a letter to Caltrans indicating concurrence with Caltrans' determinations of eligibility for the National Register for the following resources: CA-PLU-893H (not eligible), CA-PLU-2914H (not eligible), Indian Valley Road (not eligible), Union Pacific Railroad Tunnel No. 31 (not eligible), Butte County Road 50545A (eligible), Dark Canyon Road from Jarbo Gap to the Dark Canyon Road boat launch ramp (eligible as a contributing element to the Feather River Highway Historic District), and the Utah Construction Road of the Western Pacific Railroad (assumed eligible). The SHPO stated however, it was unable to concur that the segment of the Maxwell Ditch within the project's APE is ineligible for listing in the National Register. The SHPO indicated concern that the segment may contribute to the historic significance and integrity of the property as a whole. The SHPO recommended that Caltrans assume National Register eligibility of the ditch segment;

- The SHPO submitted a letter to Caltrans on May 3, 2006 requesting Caltrans' signature, which would acknowledge acceptance of SHPO's recommendation in its February 9, 2006 letter that Caltrans assume National Register eligibility for the Maxwell Ditch segment. Caltrans signed the letter on May 12, 2006 thereby concluding consultation with the SHPO regarding determinations of eligibility;

- On October 30, 2006, Caltrans submitted a Finding of Adverse Effects Report to the SHPO. Caltrans found that the project would have an adverse effect on the following historic properties: Feather River Highway Historic District, Spanish Creek Bridge as a contributive element of the Feather River Highway Historic District, and the Spanish Creek Bridge as a California Historic Truss Bridge. A draft MOA was included with the FOAE to resolve adverse effects. The letter requested SHPO's concurrence with Caltrans' FOAE and review and comments on the draft MOA;

- The SHPO submitted a letter to Caltrans on May 7, 2007 indicating concurrence with Caltrans' findings that the project will result in an adverse effect on the Feather River Highway Historic District and the Spanish Creek Bridge;

- The MOA was approved by the SHPO and Caltrans on July 28, 2008.

On April 25, 2008, Caltrans notified the ACHP in writing of the undertaking's adverse effect on historic properties. The ACHP responded on June 25, 2008 declining participation in the consultation to resolve the adverse effects. Copies of the letters are included in Appendix G.

In accordance with CEQA and NEPA, the Draft EIR/EA with Section 4(f) Evaluation was circulated for public review and comment for a 45-day period from January 10, 2007 through February 23, 2007. A notice was published in the Feather River Bulletin on January 10, 17, and 24, 2007 advertising availability of the draft environmental document. The notice also advertised a public information meeting to be held on January 25, 2007 to discuss the project and the draft environmental document. In addition to the newspaper advertisement, letters were sent directly to individual and agency stakeholders. The draft document was published on Caltrans environmental document internet website: http://www.dot.ca.gov/dist3/departments/envinternet/envdoc.htm and paper copies were made available for public review at the Quincy Public Library, 445 Jackson Street, in Quincy.

The public information meeting was held on January 25, 2007 at the Quincy Public Library meeting hall, 445 Jackson Street, in Quincy from 4:00 to 6:00 p.m. The meeting was an open-house format. A formal presentation was not made. Approximately ten people attended the meeting. Comment cards were provided to attendees. A total of six comments were received during the draft document circulation period. Written comments and Caltrans' responses to the comments are included in Appendix F.

Copies of the draft EIR/EA with Section 4(F) Evaluation were submitted to the Governor's Office of Planning and Research, State Clearinghouse (SCH), for distribution to selected state agencies in accordance with CEQA Guidelines. The SCH notified Caltrans on February 14, 2007 that no comments were submitted by any of the state agencies during the review period.

Caltrans submitted one paper copy of the Draft EIR/EA with Section 4(f) Evaluation and 12 copies on compact disc to the Department of the Interior (DOI) on January 3, 2007 for review and comment. Comments were requested by the end of the public review period, February 23, 2007. A letter was received from the DOI on April 18, 2007 with limited comments. A copy of the letter is included in Appendix F.

Agencies and stakeholders contacted during the project planning phase include:

- U.S. Department of Agriculture, Plumas National Forest (PNF), Mount Hough Ranger District
- Union Pacific Railroad
- Plumas County Department of Public Works
- California Department of Fish and Game, Region 2
- U.S. Fish and Wildlife Service
- State Office of Historic Preservation
- Native American Heritage Commission
- Maidu Tribal Organizations and Individuals
- Pacific Gas and Electric Company
- Department of the Interior

Chapter 5 List of Preparers

This EIR/EA was prepared by the California Department of Transportation, North Region Office of Environmental Management in Redding, with input from the following staff:

ELIZABETH BENNETT, Associate Environmental Planner (Archaeology). Contribution: Archaeological studies.

ROSE BISHOP, Landscape Associate. Contribution: Visual impact assessment.

TOM GRAVES, Associate Engineering Geologist. Contribution: Hazardous waste investigation.

ROXANNE HAATVEDT, Associate Environmental Planner (Generalist). Contribution: Supplemental visual impact assessment.

HARVEY STEVE, Senior Bridge Engineer (Construction). Contribution: Construction methodology.

RYAN HENRY, Transportation Engineer. Contribution: Roadway design.

MARK LOADER, Transportation Engineer. Contribution: Floodplain evaluation.

ANN MARIE MEDIN, Associate Environmental Planner (Archaeology). Contribution: Historic resource studies.

CANDACE MILLER, Associate Environmental Planner (Natural Sciences). Contribution: Biological studies.

DAVINDER MINHAS, Transportation Engineer. Contribution: Roadway design.

GEORGE PETERSHAGEN, Associate Environmental Planner (Architectural Historian). Contribution: Historic architectural studies.

LANH PHAN, Federal Highway Administration, Project Development Engineer. Contribution: Oversight relative to compliance with NEPA and other federal regulations and FHWA guidelines.

CHRIS QUINEY, Associate Environmental Planner (Generalist). Contribution: Environmental coordination and document writer.

TED SCHULTZ, Transportation Engineer. Contribution: Storm water coordination and preparation of Water Quality Assessment Report.

SHARON TANG, Transportation Engineering Technician. Contribution: Air quality analysis.

ERIC WATSON, Transportation Engineer. Contribution: Bridge design.

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Chapter 6 References

Northern Sierra Air Quality Management District Website. December 22, 2003. (http://www.nccn.net/~nsaqmd/about_nsaqmd.htm).

California Department of Transportation. Standard Specifications. 1999.

Central Valley Regional Water Qualify Control Board. Water Quality Control Plan for the Sacramento River and San Joaquin River Basins. 3rd Edition, 1994.

U.S. Department of Agriculture, Plumas National Forest, Quincy Ranger District. Finding of No Significant Impact, Proposed Spanish Creek Campground. February 23, 1987.

Exhibit 1 Project Vicinity Map

Caltrans	State of California Department of Transportation	Spanish Creek Bridge Replacement Project in Plumas County on State Route 70 near Keddie
	PLU 70-PM35.1/35.5 02-373100 ↑N	

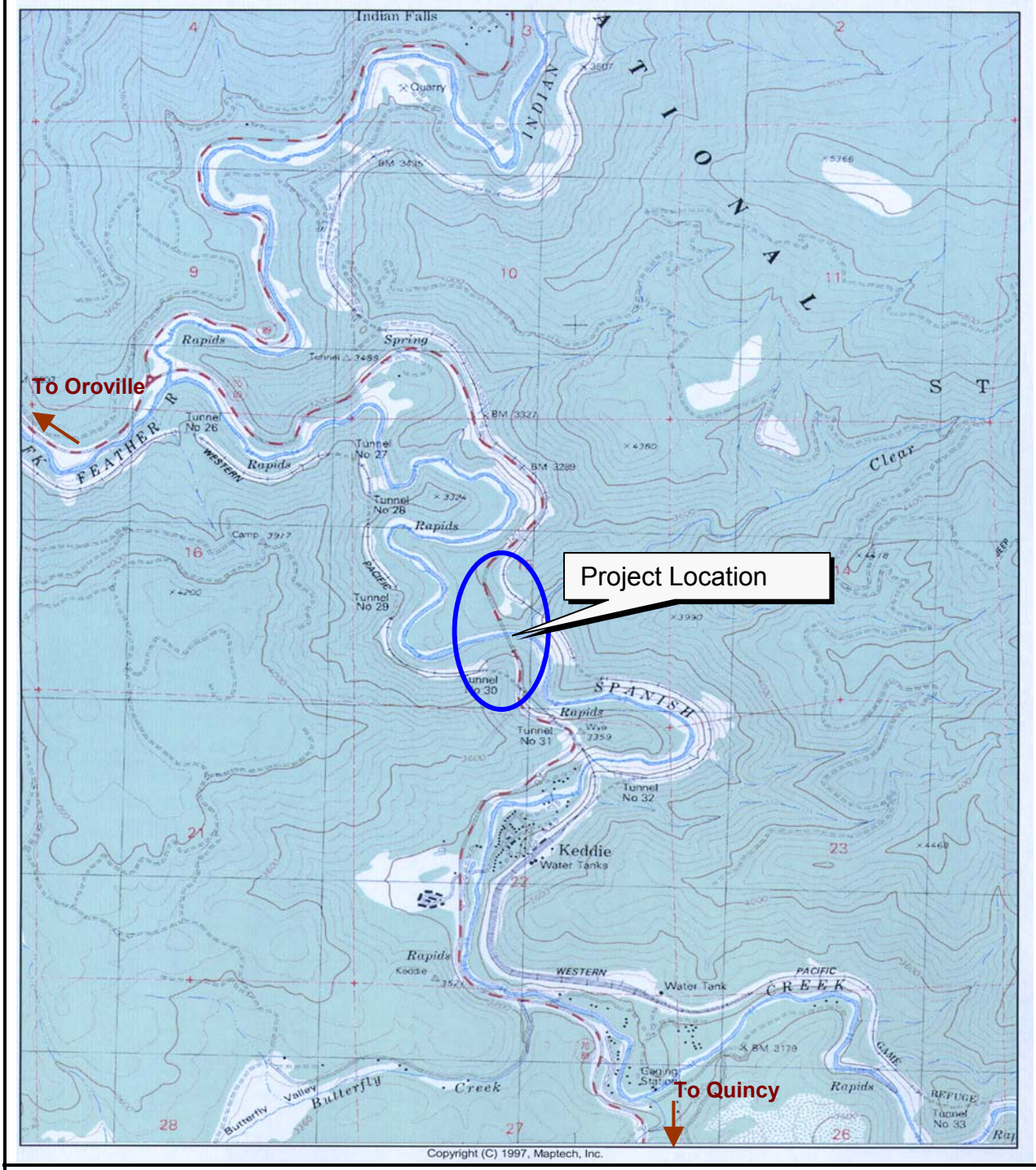


Exhibit 2 Project Location Map

Caltrans	State of California Department of Transportation	Base map: Crescent Mills Quad, Township 25N, Range 9E, Section 15
	PLU-70-PM35.1/35.5 02-373100 ↑N	

Exhibit 3 Highway Alignments 2 and 4

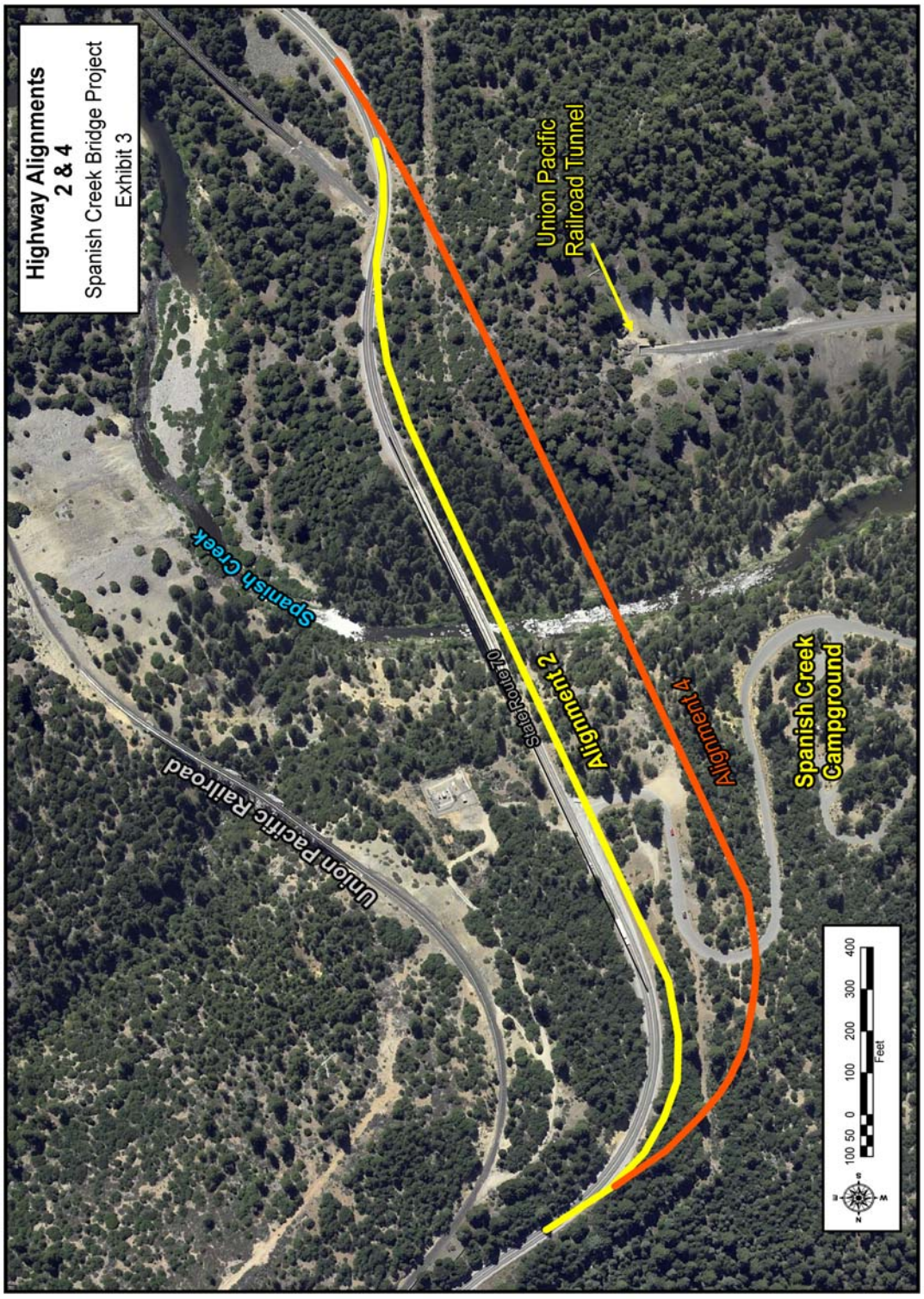


Exhibit 4 Bridge Types

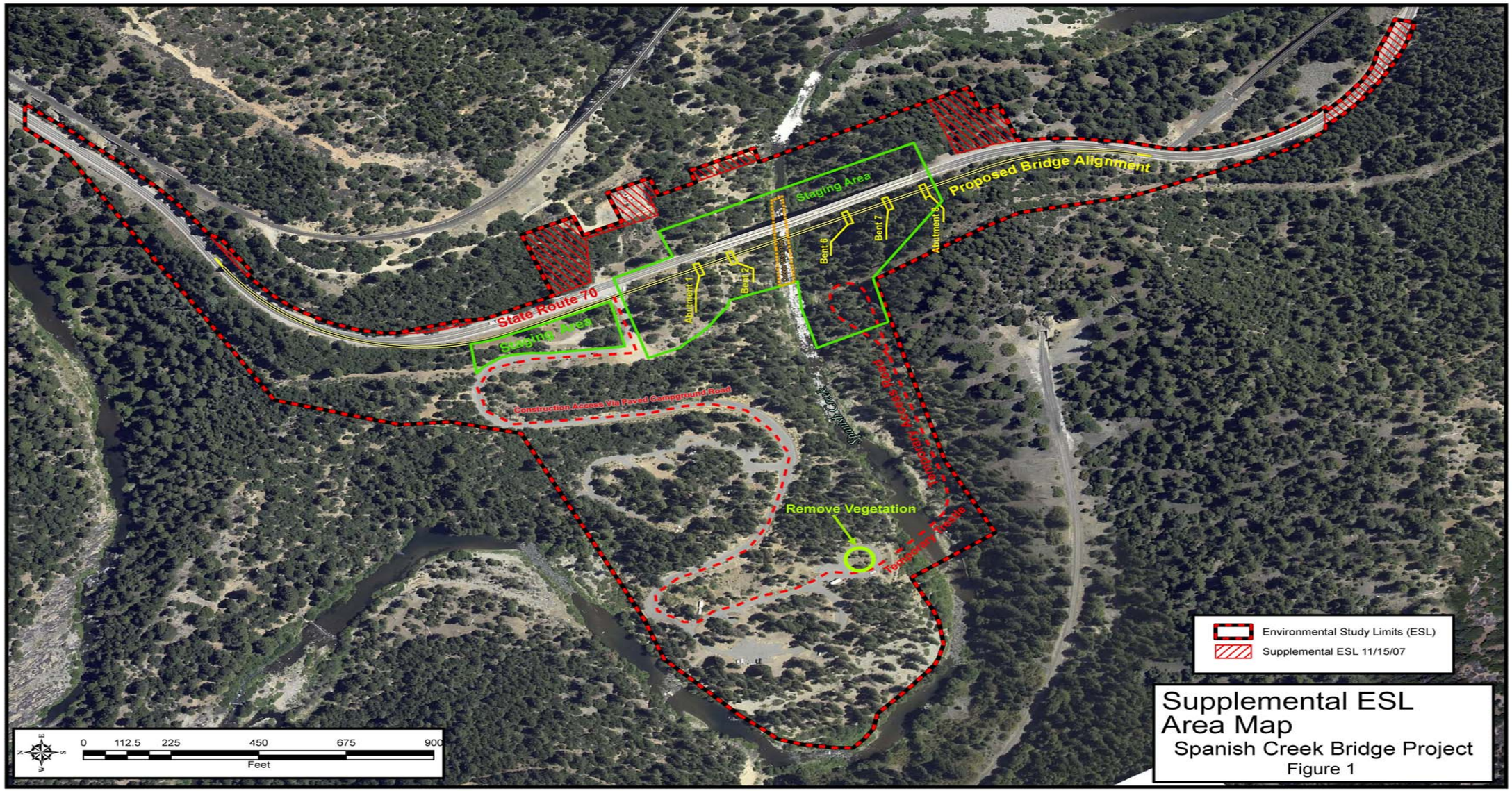
Open Spandrel Concrete Arch Box Girder

Open Spandrel Concrete Arch slab

Concrete Box Girder

Steel Plate Girder

Exhibit 5 Primary Construction Access and Staging Areas



Appendix A CEQA Checklist

The following checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. The CEQA impact levels include potentially significant impact, less than significant impact with mitigation, less than significant impact, and no impact. Please refer to the following for detailed CEQA discussions regarding impacts:

- Guidance: Title 14, Chapter 3, California Code of Regulations, Sections 15000 et seq. (http://www.ceres.ca.gov/topic/env_law/ceqa/guidelines/);
- Statutes: Division 13, California Public Resource Code, Sections 21000-21178.1 (http://www.ceres.ca.gov/topic/env_law/ceqa/stat/).

Supporting documentation of all CEQA checklist determination is provided in Chapter 2 of this Environmental Impact Report/Environmental Assessment. Documentation of "No Impact" determinations is provided at the beginning of Chapter 2. Discussion of all impacts, avoidance, minimization, and/or compensation measures under the appropriate topic headings in Chapter 2.

	CEQA			
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
AESTHETICS - Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	X	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	X	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	X	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	X
AGRICULTURE RESOURCES - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	X
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	X
AIR QUALITY - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	X
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	X	☐

	CEQA			
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	X
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	X
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	X
BIOLOGICAL RESOURCES - Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	X	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	X	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	X	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	X

	CEQA			
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
COMMUNITY RESOURCES - Would the project:				
a) Cause disruption of orderly planned development?	☐	☐	☐	X
b) Be inconsistent with a Coastal Zone Management Plan?	☐	☐	☐	X
c) Affect life-styles, or neighborhood character or stability?	☐	☐	☐	X
d) Physically divide an established community?	☐	☐	☐	X
e) Affect minority, low-income, elderly, disabled, transit-dependent, or other specific interest group?	☐	☐	☐	X
f) Affect employment, industry, or commerce, or require the displacement of businesses or farms?	☐	☐	☐	X
g) Affect property values or the local tax base?	☐	☐	☐	X
h) Affect any community facilities (including medical, educational, scientific, or religious institutions, ceremonial sites or sacred shrines?	☐	☐	☐	X
i) Result in alterations to waterborne, rail, or air traffic?	☐	☐	☐	X
j) Support large commercial or residential development?	☐	☐	☐	X
k) Affect wild or scenic rivers or natural landmarks?	☐	☐	☐	X
l) Result in substantial impacts associated with construction activities (e.g., noise, dust, temporary drainage, traffic detours and temporary access, etc.)?	☐	☐	X	☐
CULTURAL RESOURCES - Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	X	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	X
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	X
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	X

	CEQA		
Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact

GEOLOGY AND SOILS - Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				X
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
ii) Strong seismic ground shaking?				X
iii) Seismic-related ground failure, including liquefaction?				X
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				X
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				X
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X

HAZARDS AND HAZARDOUS MATERIALS - Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within				X

	CEQA			
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
one-quarter mile of an existing or proposed school?				
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	X
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	X
HYDROLOGY AND WATER QUALITY - Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	X	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	X	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would	☐	☐	☐	X

	CEQA		
Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact

result in flooding on- or off-site?

e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	X
f) Otherwise substantially degrade water quality?	☐	☐	☐	X
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	X
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	X
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	X

LAND USE AND PLANNING - Would the project:

a) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	X
b) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	X

MINERAL RESOURCES - Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	X
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	X

NOISE - Would the project result in:

a) Exposure of persons to or generation of noise levels in

	CEQA			
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	X
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	X
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	X
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	X
POPULATION AND HOUSING - Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	X
PUBLIC SERVICES -				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				

	CEQA			
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
Fire protection?	☐	☐	☐	X
Police protection?	☐	☐	☐	X
Schools?	☐	☐	☐	X
Parks?	☐	☐	☐	X
Other public facilities?	☐	☐	☐	X

RECREATION -

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? ☐ ☐ ☐ X

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? ☐ ☐ ☐ X

TRANSPORTATION/TRAFFIC - Would the project:

a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? ☐ ☐ ☐ X

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? ☐ ☐ ☐ X

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? ☐ ☐ ☐ X

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? ☐ ☐ ☐ X

e) Result in inadequate emergency access? ☐ ☐ ☐ X

f) Result in inadequate parking capacity? ☐ ☐ ☐ X

g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? ☐ ☐ ☐ X

	CEQA			
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
UTILITIES AND SERVICE SYSTEMS - Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	X
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	X
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	X
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	X
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	X
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	X
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	X
MANDATORY FINDINGS OF SIGNIFICANCE -				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	X	☐	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	X	☐

	CEQA			
	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

Appendix B Section 4(f) Evaluation

Replacement of the Spanish Creek Bridge (Bridge No. 09-0015) on State Route 70 in Plumas County near Keddie

Submitted Pursuant to 49 U.S.C. 303

INTRODUCTION

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 U.S.C 303, declares that "it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C. 327.

Section 4(f) specifies that the Secretary of Transportation may approve a transportation program or project requiring use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if:

1. there is no prudent and feasible alternative to using that land; and

2. the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

Section 4(f) further requires consultation with the Department of the Interior and, as appropriate, the involved offices of the Departments of Agriculture and Housing and Urban Development in developing transportation projects and programs which use lands protected by Section 4(f). If historic sites are involved, then coordination with the State Historic Preservation Officer is also needed.

DESCRIPTION OF PROPOSED PROJECT

The California Department of Transportation (Caltrans) proposes to replace the Spanish Creek Bridge (Bridge No. 09-0015) on State Route (SR) 70 in Plumas County, post mile 35.3, near the community of Keddie. SR 70 is a two-lane conventional highway that connects SR 99 near Sacramento in Sutter County and U.S. 395 in southeastern Lassen County. The new bridge would be constructed parallel to the existing bridge and the roadway would be realigned to conform to the new bridge. Two build alternatives and a No Build alternative were developed to address the purpose and need of the project. A third build alternative was considered for the project; however, it would only delay the need for eventual replacement of the bridge. Since this eliminated alternative offered potential to avoid and/or minimize harm to the Spanish Creek Bridge and the Feather River Highway Historic District, it is included in the discussion below. The alternatives considered are as follows:

- Alternative A entails construction of a new bridge, parallel to and immediately west of the existing bridge, and seismically retrofitting the existing bridge. The seismic retrofit would consist of strengthening the bridge foundations and superstructure to withstand seismic forces. The existing bridge would remain in place for pedestrian and bicycle access. Motorized traffic would be limited to the new bridge;

- Alternative B involves construction of a new bridge, parallel to and immediately west of the existing bridge, and removal of the existing bridge. Alternative C (eliminated alternative) would rehabilitate the existing bridge. The rehabilitation project would consist of strengthening to withstand seismic loads and accommodate large truck permit loads. The work would include foundation strengthening, strengthening of the steel superstructure members, deck replacement, bearing replacement, bridge rail replacement, and spot painting. It is estimated that the rehabilitation alternative would extend the structure's life up to 25 years before another rehabilitation project would be necessary. This alternative would not address the fatigued steel or the lack of shoulders;

- .Alternative D is the "No Build" alternative, which assumes the existing bridge would be maintained and substantial improvements would not be made.

The purpose of the project is to provide a road crossing that meets modern highway design standards and accommodates interregional transportation needs. The existing Spanish Creek Bridge was constructed in 1932 and is at or near the end of its service life. The bridge exhibits signs of significant structural fatigue, does not comply with modern seismic standards, lacks standard shoulder width, and cannot accommodate some large permit loads due to lane width and structural limitations for weight loading.

Based on an evaluation of environmental impacts, consideration of public input, and approval of the Final EIR/EA, Caltrans has identified Alternative B (Build New Bridge and Remove Existing Bridge) as the preferred alternative. Additional description of the project and alternatives, including those alternatives that were eliminated, are found in Chapter 1 of the Spanish Creek Bridge EIR/EA.

LIST AND DESCRIPTION OF SECTION 4(f) PROPERTIES

The locations of properties evaluated relative to Section 4(f) are shown in Figure 1.

The Spanish Creek Bridge: The Spanish Creek Bridge (Bridge No. 09-0015) [Figure 2] is a riveted steel Warren deck truss carried on tall K-truss tower piers. It is approximately 600 feet in length, 23 feet wide between curbs, and approximately 140 feet above Spanish Creek. The bridge was designed by the Bridge Department of

the California Division of Highways and was constructed in 1932. It is eligible for inclusion in the National Register of Historic Places (National Register) and is a contributing element of the Feather River Highway Historic District, which is also eligible. The bridge was determined individually eligible for the National Register on January 9, 1986, under the Historic Truss Bridges in California Thematic Determination of Eligibility under Criterion A. The Spanish Creek Bridge is significant primarily as a historical transportation link, serving one of the major crossings on SR 70. The bridge has capacity and structural deficiencies and is approaching the end of its useful life. The bridge is located on SR 70 in Plumas County near the community of Keddie. It is owned by Caltrans and is located on an easement through Plumas National Forest land.

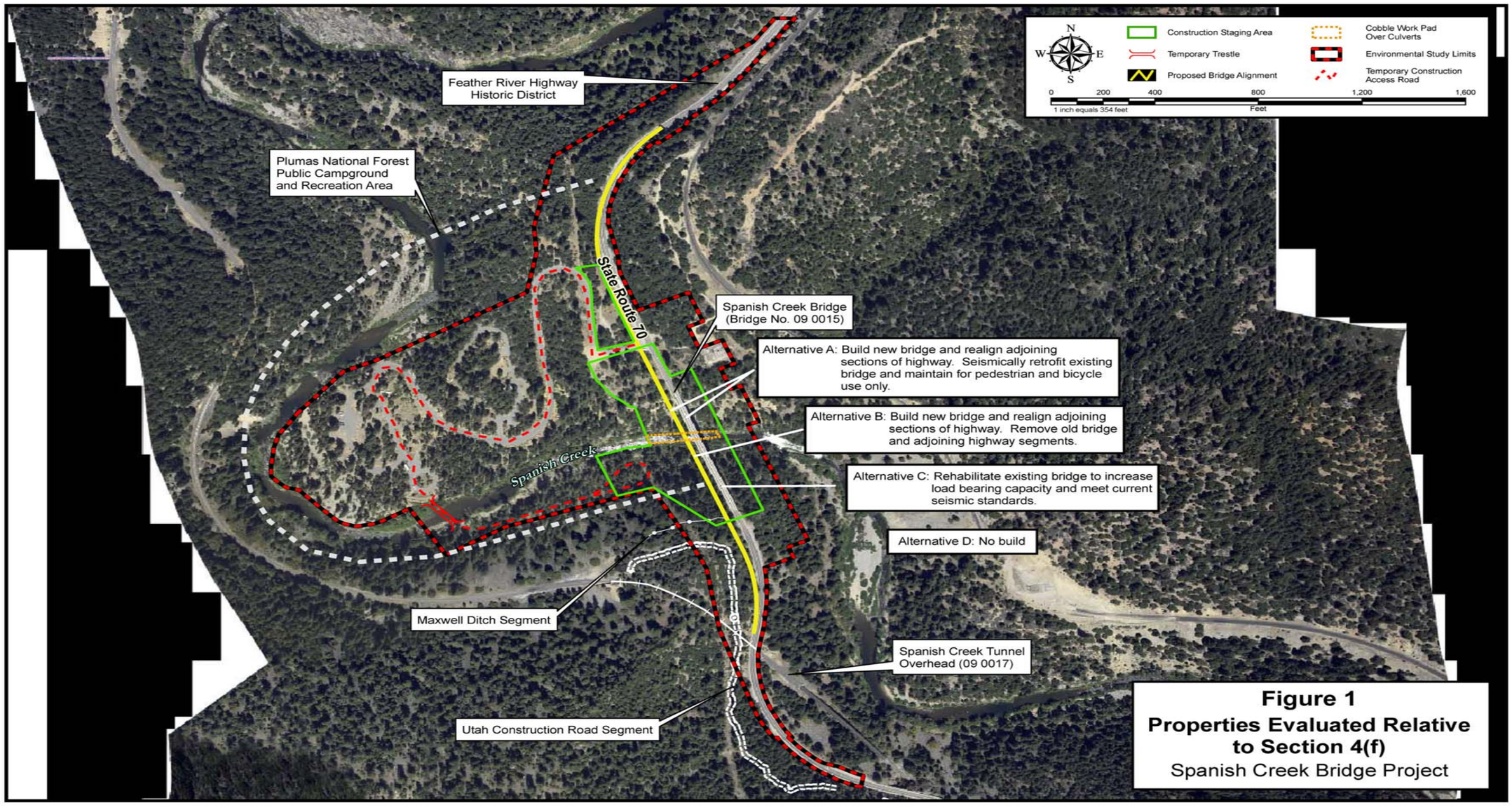


Figure 1
Properties Evaluated Relative to Section 4(f)
Spanish Creek Bridge Project

Figure 2 - Spanish Creek Bridge (Bridge No. 09-0015)

Feather River Highway Historic District: The section of SR 70 from Jarbo Gap in Butte County to Keddie in Plumas County, a distance of 48 miles, is a historic highway district (Figure 3). The highway was constructed between March 1928 and August 1937. It was determined eligible for the National Register in April 1987. It is also a National Scenic Byway. Scenic and historic features include rock masonry walls, water fountains, steel truss bridges, tunnels, various railroad features, rock formations, waterfalls, remnants of resorts, mining and timber mills, hydroelectric facilities, and the North Fork Feather River and its tributaries. The annual average daily traffic (Annual ADT) on this section of highway in the vicinity of the Spanish Creek Bridge is approximately 3,000 vehicles.[4]

[4] Annual ADT is the total traffic volume for the year divided by 365 days. The traffic count year is from October 1st through September 30th. Very few locations in California are actually counted continuously. Traffic counting is generally performed by electronic counting instruments moved from location to location throughout the state in a program of continuous traffic count sampling. The resulting counts are adjusted to an estimate of annual average daily traffic by compensating for seasonal influence, weekly variation and other variables, which may be present.

Figure 3 – Feather River Highway Historic District

Plumas National Forest Recreation Area: The Plumas National Forest recreation area, which includes the Spanish Creek Campground (recreation area), is located on the west side of SR 70 adjacent to the Spanish Creek Bridge within Plumas National Forest (PNF) [Figure 4]. The recreation area as defined by PNF is approximately 46 acres. The Spanish Creek Campground was developed to replace two PNF campgrounds damaged during a major flood in 1986. The flood destroyed 39 campsites within the Belden and Indian Jim campgrounds, which were located adjacent to SR 70 within the base floodplain of the North Fork Feather River. Due to previous flooding problems, PNF decided to abandon these sites and find a better location to re-establish a campground. According to a Finding of No Significant Impact approved by PNF on February 23, 1987, the Spanish Creek site was selected for the following reasons: "It is located out of the floodplain; it is close to Quincy (7 miles); there are no fully developed campgrounds in the area; it provides easy access to Bucks Lake and Lakes Basin Recreation Areas and the Bucks Lake Wilderness; other PNF developed campgrounds are at or near capacity; fishing access; centrally located in the County; generates recreation dollars to the local communities; provides a site for use by local organizations such as Boy Scouts, Girl Scouts, etc., access to a wildlife refuge; will replace lost campsites from the flooded campgrounds; close to power and water sources; availability of an area for an Incident Command Base, if needed; and uncrowded camping units. "

Figure 4 – Plumas National Forest recreation area (Spanish Creek Campground)

The original proposal was to provide bathrooms with showers and flush toilets at the new campground, but these improvements have not yet been made due to funding shortfalls. The existing facility is open May through September and has 20 campsites, vault toilets, and potable water. A campground host is present and reservations are accepted. Day use parking is located in the lower reach of the campground near the creek.

PNF considers the recreation area, which includes the Spanish Creek Campground, a significant resource relative to Section 4(f) because of its desirable attributes, high use potential, and the fact that there are no other improved public camping facilities in the area. The improved campground has been in use since 2004. According to PNF's records, during the 2004, 2005, and 2006 campground seasons, the number of campsites used within the Spanish Creek Campground was 935, 1,519, and 2,182 respectively. Seventy-six campground reservations were made during 2006, the first year the campground reservation system was in place.

Maxwell Ditch Segment: The Maxwell Ditch (CA-PLU-2794H) [Figure 5] was constructed by the Maxwell Ditch and Mine Company for hydraulic gold mining and appears to have been in operation from 1872 to 1884. Only a short segment of

earthen ditch is located within the project limits on PNF land adjacent to SR 70. The ditch segment begins near the southbound shoulder of SR 70 and extends westerly approximately 300 feet. It is approximately 7 feet wide by 1.5 feet deep. The outer berm of the downhill slope is 3 feet wide.

Figure 5 - Maxwell Ditch Segment

The segment of ditch within the project limits is a mundane linear trough that is physically separated from the balance of the ditch by the highway and railroad on its eastern end and a landslide on its western end. The physical characteristics of the ditch have been affected by years of landslides and natural erosion leaving its alignment as the only indicator of what the ditch may have been like during its years of operation. The Maxwell Ditch segment will be assumed eligible for the National Register and will be treated as such for purposes of the proposed project.

Utah Construction Road Segment: The Utah Construction Road (Figure 6) was a wagon road used for construction of the Western Pacific Railroad. The road extends through California, Nevada, and Utah from a point near Oroville to Salt Lake City. This approximately one-mile long segment of the Utah Construction Road is isolated from the remains of the original road by highway and railroad construction on the eastern end and a long landslide on its western end. Natural erosion has also taken

a heavy toll. This road segment has also been subject to the effects of modern machinery associated with residential construction, logging, and perhaps firefighting. The width of this remaining segment is as little as two feet (due to highway construction) to as much as twelve feet (widened by modern power equipment). The road segment within the project limits is located on PNF and Union Pacific Railroad property adjacent to SR 70. The Utah Construction Road segment will be assumed eligible for the National Register and will be treated as such for purposes of the proposed project.

Figure 6 – Utah Construction Road Segment

IMPACTS TO THE SPANISH CREEK BRIDGE (BRIDGE NO. 09-0015)

Alternative A (Build new bridge and seismic retrofit existing bridge)

Alternative A would lessen the historical integrity of the Spanish Creek Bridge in the qualities of setting, feeling, and association by placing a new, distracting structure near the historic bridge. This new bridge, even if it were a design type used during the period of significance of the historic bridge, would constitute an element that did not exist within the viewscape of the historic bridge during its period of significance. Alternative A would retain the historic bridge for purposes other than “an important

link in a major transportation system," the role under which the historic bridge was determined sufficiently significant to justify a determination of eligibility for the National Register. Thus, Alternative A would result in a use of the historic bridge.

Alternative B (Build new bridge and remove existing bridge)

Alternative B entails construction of a new bridge and removal of the historic bridge from this location entirely, requiring mitigation of the loss. Removal, then, would constitute an adverse effect and use of the historic bridge.

Alternative C (Rehabilitate Bridge)

Alternative C would rehabilitate the existing bridge through strengthening against seismic events (commonly referred to as "seismic retrofit") and increasing load capacity to allow passage by permit loads. This work would include strengthening the concrete foundations and steel structural members, replacement of the bearings, bridge deck and railing, and application of new paint. The Spanish Creek Bridge is but one of seven major bridges within the Feather River Highway Historic District. During the period of 2003 to 2006, Caltrans initiated a project to seismically retrofit and strengthen (rehabilitate) five of those bridges. The project included engineered plans which minimzed physical modifications to the bridges, including the use of like materials and limiting changes to the physical attributes of the structure to the extent possible. This resulted in a determination of no adverse effect under a Programmatic Agreement between the SHPO, FHWA, the Advisory Council on Historic Preservation, and Caltrans relative to the seismic retrofit of bridges. Therefore, given that Caltrans has successfully designed and implemented prior bridge rehabilitation projects and avoided an adverse effect or use of the historic bridges, it would seem reasonable that the currently proposed bridge rehabilitation project could be designed to avoid harm or use of the Spanish Creek Bridge.

Alternative D (No Build)

Alternative D would entail that the existing bridge would be maintained and substantial improvements would not be made, thereby avoiding an immediate use of the Spanish Creek Bridge.

AVOIDANCE ALTERNATIVES FOR THE SPANISH CREEK BRIDGE

An avoidance alternative must be prudent and feasible to be considered for implementation. An alternative is feasible if it can be constructed based on accepted engineering principles. The following six-factor test was applied pursuant to 23 CFR 774.117 in determining whether an alternative would be prudent:

1. Compromises the project so that it is unreasonable given the purpose and need;

2. Results in unacceptable safety or operational problems;

3. After reasonable mitigation, still causes:

    - Severe social, economic, or environmental impacts;
    - Severe disruption to established communities;
    - Severe environmental justice impacts; or
    - Severe impacts to other federally protected resources.

4. Results in construction, maintenance, or operational costs of an extraordinary magnitude;

    - Consider factors such as: the percentage difference in the costs of the alternatives; how the cost difference relates to the total cost of similar transportation projects in the applicant's annual budget; and the extent to which the increased cost for the project would adversely impact the applicants' ability to fund other transportation projects.

5. Causes other unique problems or unusual factors; or

6. Involves multiple factors listed above that while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

<u>Alternative A (Build New Bridge and Seismic Retrofit Existing Bridge)</u>

Alternative A entails construction of a new bridge immediately adjacent to the existing bridge. Alternative A would not avoid use of the old bridge by virtue of the alteration to the viewscape from the historic bridge and by alteration of the purpose for which the bridge itself is utilized, both of which are crucial to its historic integrity.

<u>Alternative B (Build New Bridge and Remove Existing Bridge)</u>

Alternative B entails removal of the existing bridge; therefore, it would not avoid use of the Spanish Creek Bridge.

Alternative C (Rehabilitate Existing Bridge)

Alternative C is feasible to implement and would avoid use of the Spanish Creek Bridge, however it is not a prudent avoidance alternative because it falls within factors 1 and 2 of the six-factor test. Implementation of Alternative C would not be a reasonable course of action because it would not fully address the project purpose and need (Factor 1) and it would result in unacceptable safety and operational problems (Factor 2).

The rehabilitation project would not entirely address fatigue cracks and distortion in the steel members, which are present throughout the structure due to its age. The bridge is near the end of its fatigue service life and is currently classified as fracture critical. It is estimated that Alternative C would extend the service life of the structure up to 25 years, after which time a major rehabilitation project may be necessary.

In addition, the rehabilitation would not address the nonstandard width of the existing bridge deck. Rehabilitation and maintenance of the existing structure would require extra safety precautions due to the narrow width of the deck.

Alternative D (No Build)

Alternative D would avoid use of the Spanish Creek Bridge and is feasible to implement, but is not a prudent avoidance alternative because it falls within factors number 1 and 2 of the six-factor test. Implementation of Alternative D would not be a reasonable course of action because it would not address the project purpose and need (Factor 1) and it would result in unacceptable safety and operational problems (Factor 2). This alternative would not address fatigue cracks and distortion in the steel members, which are present throughout the structure due to its age. Calculations show that the bridge is at or near the end of its fatigue service life. The bridge is currently classified as fracture critical. Also, it would not address the width and weight deficiencies of the existing bridge. Restrictions on permit loads would continue; thus, transportation needs of the public, industry, and emergency response personnel would not be met. Also, maintenance of the existing structure would require extra safety precautions due to the narrow width of the existing bridge deck.

MEASURES TO MINIMIZE HARM TO THE SPANISH CREEK BRIDGE

Alternative A (Build New Bridge and Retrofit Existing Bridge)

Although the Spanish Creek Bridge would remain in place with Alternative A, alterations to the bridge and its surroundings could affect the historic integrity of the bridge, constituting a use of the bridge. In addition, this alternative also proposes retaining the historic bridge for purposes other than "an important link in a major transportation system," the role under which the historic bridge was determined sufficiently significant to justify a determination of eligibility for the National Register.

Caltrans has entered into an MOA with the SHPO to resolve adverse effects to historic properties resulting from the project. Under the terms of the MOA Caltrans would prepare a permanent record of the Spanish Creek Bridge in accordance with Historic American Engineering Record (HAER) procedures and guidelines. Some of that record will be made immediately available to the traveling public through an interpretive display that is also called for by the MOA.

Alternative B (Build New Bridge and Remove Existing Bridge)

With Alternative B, the following measures are proposed to mitigate the loss of the Spanish Creek Bridge:

Caltrans has entered into an MOA with the SHPO to resolve adverse effects to historic properties resulting from the project. Under the terms of the MOA Caltrans would prepare a permanent record of the Spanish Creek Bridge in accordance with HAER procedures and guidelines. Some of that record will be made immediately available to the traveling public through an interpretive display that is also called for by the MOA.

Alternative C (Rehabilitate Bridge)

Alternative C would be designed to strengthen the bridge while minimizing physical alteration of the bridge's appearance. Although the basic rehabilitation project would only forestall a subsequent rehabilitation effort or complete bridge replacement, it would minimize harm to the structure's integrity and eligibility to the National Register.

Alternative D (No Build)

With Alternative D the existing bridge would be maintained and substantial improvements would not be made. Therefore, no measures to minimize harm would be required as this Alternative avoids an immediate use of the historic bridge.

COORDINATION RELATIVE TO THE SPANISH CREEK BRIDGE

SHPO consultation began with the submittal of a Historic Property Survey Report (HPSR) and supporting technical studies in December 2005. The SHPO concurred with the eligibility determinations by letters dated February 9, 2006 and May 3, 2006. The Spanish Creek Bridge was determined individually eligible for the National Register on January 9, 1986, as one component of the Historic Truss Bridges of California Thematic Determination of Eligibility under Criterion A. This bridge is significant primarily as a historical transportation link, serving one of the major crossings on SR 70. It also is a contributive element of the Feather River Highway Historic District.

Caltrans found that the proposed bridge replacement project would have an adverse effect upon the Spanish Creek Bridge. The Finding of Effect report was submitted to the SHPO on October 30, 2006. The SHPO issued a letter on May 7, 2007 concurring with Caltrans findings.

Caltrans provided copies of the draft Section 4(f) Evaluation, appended to the draft Environmental Assessment, to the Department of the Interior (DOI) during the public circulation period. One paper copy and 12 copies on compact disc were forwarded to the DOI on January 3, 2007 for review and comment pursuant to 23 CFR 771.135(i). Comments on the draft Section 4(f) Evaluation were requested by the close of the public review period, February 23, 2007. The DOI issued a letter on April 18, 2007 with the following recommendations: “Since SR-70 transits considerable area within Plumas National Forest, it may be desirable to contact their staff to determine if they may have any concerns.” And “To avoid or minimize affecting this contributing element [Spanish Creek Bridge] to the Historic District, consultation with the State Historic Preservation Office should be completed prior to selecting a final design or finalizing commitments for measures to minimize harm.” The letter also indicated that no responses or comments had been received from any other Department of the Interior bureaus or offices. A copy of the letter is contained in Appendix F of the EIR/EA.

In order to address the adverse effect of the project, Caltrans entered into a MOA with the SHPO in accordance with 36 CFR 800 (Section 106) on July 28, 2008.

LEAST HARM ANALYSIS AND CONCLUDING STATEMENT REGARDING THE SPANISH CREEK BRIDGE

The least harm analysis is based on a comparison of each project alternative in relation to the following factors:

1. Ability to mitigate adverse impacts to each Section 4(f) resource;

2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features;

3. Relative significance of each Section 4(f) resource;

4. Views of the officials with jurisdiction over each Section 4(f) property;

5. Degree to which each alternative meets the purpose and need;

6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f); and

7. Substantial differences in costs among alternatives.

Alternative A (Build New Bridge and Seismic Retrofit Existing Bridge)

1. Ability to mitigate adverse impacts to each Section 4(f) resource: Mitigation would consist of HAER recordation and installation of an informational kiosk in the vicinity of the bridge with interpretive information pertaining to the Spanish Creek Bridge.

2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features. Although the existing bridge would remain in place, the setting would be changed considerably due to the introduction of a new structure in close proximity to the historic bridge and change in function of the existing bridge Further, this new bridge, even if it were a design type used during the period of significance of the historic bridge, would constitute an element that did not exist within the viewscape of the historic bridge during its period of significance. As a result, the historic integrity of the Spanish Creek Bridge could be affected in the qualities of setting, feeling, and association.

3. Relative significance of each Section 4(f) resource: The Spanish Creek Bridge was determined eligible for the National Register on January 9, 1986, under the Historic Truss Bridges in California Thematic Determination of Eligibility under Criterion A as an important link in a major transportation system at the statewide level of significance in the area of transportation. The Spanish Creek Bridge is a contributing element of the Feather River Highway Historic District, which is eligible for listing in the National Register under Register Criteria A and C at the statewide level of significance in the areas of architecture, engineering and transportation.

4. Views of the officials with jurisdiction over each Section 4(f) property: The SHPO concurs with the proposal to replace the existing structure and mitigation to resolve the adverse effects of the undertaking.

5. Degree to which each alternative meets the purpose and need: Alternative A satisfies the project purpose and need in that it provides a new bridge, but does not address the fact that the existing bridge is fracture critical. The historic bridge would require continued maintenance, including painting and the replacement or strengthening of steel members in the future.

6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f): The project would result in temporary effects upon the environment due to the removal of vegetation and earth disturbance associated with construction access and staging. However, with this alternative, there are no adverse impacts to resources not protected by Section 4(f).

7. Substantial differences in costs among alternatives: The estimated cost to construct Alternative A is reported in the 2003 Project Scope Summary Report as $29.2 million versus $21.3 million for Alternative B and $10.5 million for Alternative C. In addition, with Alternative A, the existing (historic) bridge would remain in place, requiring ongoing maintenance costs for the painted finish and future rehabilitation efforts to address the continued deterioration (fatigue) of the structural steel.

Alternative B (Build New Bridge and Remove Existing Bridge)

1. Ability to mitigate adverse impacts to each Section 4(f) resource: Mitigation consists of HAER recordation and installation of an informational kiosk in the vicinity of the bridge with interpretive information pertaining to the Spanish Creek Bridge.

2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features: The bridge and adjoining sections of highway will no longer exist with this alternative.

3. Relative significance of each Section 4(f) resource: The Spanish Creek Bridge was determined eligible for the National Register on January 9, 1986, under the Historic Truss Bridges in California Thematic Determination of Eligibility under Criterion A as an important link in a major transportation system at the statewide level of significance in the area of transportation. The Spanish Creek Bridge is a contributing

element of the Feather River Highway Historic District, which is eligible for listing in the National Register under Register Criteria A and C at the statewide level of significance in the areas of architecture, engineering and transportation.

4. Views of the officials with jurisdiction over each Section 4(f) property: The SHPO concurs with the proposal to replace the existing structure and mitigation to resolve the adverse effects of the undertaking.

5. Degree to which each alternative meets the purpose and need: Alternative B best meets the project purpose and need because it provides a low maintenance structure that meets modern transportation needs.

6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f): The project will result in temporary effects upon the environment due to the removal of vegetation and earth disturbance associated with construction access and staging. However, with this alternative, there are no adverse impacts to resources not protected by Section 4(f).

7. Substantial differences in costs among alternatives: The estimated cost of Alternative B is reported in the 2003 Project Scope Summary Report as $21.3 million versus $29.2 million for Alternative A and $10.5 million for Alternative C. The existing bridge would be removed thereby eliminating the need for additional maintenance and a future project to address the deteriorating structural steel.

<u>Alternative C Rehabilitate Existing Bridge</u>

1. Ability to mitigate adverse impacts to each Section 4(f) resource: To avoid a use of the bridge, it would be necessary to incorporate design measures which utilize like materials and minimize physical alterations of the bridge to the extent possible, i.e., use design features similar to those utilized for the previous rehabilitation of the five other major bridges within the Feather River Highway Historic District. Although efforts would be made to minimize alterations, the historical integrity of the Spanish Creek Bridge may still be lost in the process.

2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features: Although efforts would be made to minimize alterations, the historical integrity of the Spanish Creek Bridge may

still be lost in the process. The rehabilitation effort would prolong the bridge's life by an estimated 25 years. Additional modifications would be necessary in the future. In time, it would be necessary to replace essentially all of the steel within the structure. Future rehabilitation efforts would face the same problems as the currently proposed project with respect to temporary construction access and staging, e.g., access through the campground, vegetation clearing, and construction of temporary access roads.

3. Relative significance of each Section 4(f) resource: The Spanish Creek Bridge was determined eligible for the National Register on January 9, 1986, under the Historic Truss Bridges in California Thematic Determination of Eligibility under Criterion A as an important link in a major transportation system at the statewide level of significance in the area of transportation. The Spanish Creek Bridge is a contributing element of the Feather River Highway Historic District, which is eligible for listing in the National Register under Register Criteria A and C at the statewide level of significance in the areas of architecture, engineering and transportation.

4. Views of the officials with jurisdiction over each Section 4(f) property: The SHPO concurs with the proposal to replace the existing structure and mitigation to resolve the adverse effects of the undertaking.

5. Degree to which each alternative meets the purpose and need: This alternative does not meet the project purpose and need because it does not replace the fatigued steel in its entirety. In addition, it does not address the width limitations of the existing bridge.

6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f): The project will result in temporary effects upon the environment due to the removal of vegetation and earth disturbance associated with construction access and staging. However, with this alternative, there are no adverse impacts to resources not protected by Section 4(f).

7. Substantial differences in costs among alternatives: The estimated cost of Alternative C is reported in the 2003 Project Scope Summary Report as $10.5 million versus $29.2 million for Alternative A and $21.3 million for Alternative B. Alternative C would prolong the structure's life for approximately 25 years. At that point, another rehabilitation effort would be necessary to repair and replace other fatigued structural members.

Alternative D (No Build).

1. Ability to mitigate adverse impacts to each Section 4(f) resource: An immediate adverse effect or use of Section 4(f) resources would be avoided with the No Build Alternative.

2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features: There would be no harm to the Spanish Creek Bridge.

3. Relative significance of each Section 4(f) resource: The Spanish Creek Bridge was determined eligible for the National Register on January 9, 1986, under the Historic Truss Bridges in California Thematic Determination of Eligibility under Criterion A as an important link in a major transportation system at the statewide level of significance in the area of transportation. The Spanish Creek Bridge is a contributing element of the Feather River Highway Historic District, which is eligible for listing in the National Register under Register Criteria A and C at the statewide level of significance in the areas of architecture, engineering and transportation.

4. Views of the officials with jurisdiction over each Section 4(f) property: The SHPO concurs with the proposal to replace the existing structure and mitigation to resolve the adverse effects of the undertaking.

5. Degree to which each alternative meets the purpose and need: Alternative D is the “No Build” alternative, which does not address the project purpose and need. Under this alternative, the existing bridge would be maintained and substantial repairs or improvements would not be made. The structural integrity of the bridge would continue to deteriorate and oversize vehicle permit loads would continue to be limited due to the width and weight capacity of the bridge. Maintenance costs would increase, weight loads of vehicles could be further restricted in the future, and eventually the bridge would need to be closed to traffic.

6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f): Restrictions would remain on vehicle loads due to weight and width limitations of the existing bridge. This could result in potential social and economic impacts due to restrictions on commercial and emergency response equipment, e.g., railroad and utility repair equipment, and fire suppression equipment, in the future.

7. Substantial differences in costs among alternatives: Alternative D would incur costs for maintenance of the steel paint finish and periodic inspections of the steel superstructure. In addition, this alternative would only delay the eventual rehabilitation or replacement of the bridge.

In summary, Alternative A would meet the project purpose and need by providing a new modern bridge. However, even though the existing bridge would remain in place, the eligibility of the historic bridge would be adversely affected. In addition, Alternative A would still require additional maintenance of the existing Spanish Creek Bridge.

Alternative B provides a modern, low maintenance bridge that will accommodate regional transportation needs. Removal of the existing bridge will eliminate the costs associated with maintenance or subsequent rehabilitation work on the historic structure and the necessity to utilize the PNF public recreation area and campground for construction access and staging. In addition, it will enable timely improvement of the highway system and proper documentation of the historic bridge through HAER recordation while the bridge is relatively unaltered.

Alternative C does not satisfy the project purpose and need because it would not replace the fatigued steel in its entirety. Successive rehabilitation efforts or future bridge replacement would be necessary. In addition, Alternative C would not address the lack of standard width shoulders.

Alternative D would avoid an immediate use of the Spanish Creek Bridge. However, this alternative does not meet the project purpose and need because it does not address the fact that the bridge's steel superstructure is fracture critical and the bridge is unable to accommodate oversize vehicle permit loads. Restrictions on permit loads would continue. Transportation needs of the public, industry, and emergency response personnel would not be met. Also, maintenance of the existing structure would require extra safety precautions due to the narrow width of the existing bridge deck.

Based on the above considerations, there is no feasible and prudent alternative to the replacement of the Spanish Creek Bridge; and the proposed action includes all possible planning to minimize harm to the Spanish Creek Bridge resulting from such use and causes the least overall harm in light of the statute's preservation purpose.

IMPACTS TO THE FEATHER RIVER HIGHWAY HISTORIC DISTRICT

Alternative A (Build new bridge and seismic retrofit existing bridge)

Alternative A would lessen the historical integrity of the Feather River Highway Historic District in the qualities of design, materials, workmanship, setting, feeling, and association (six of seven qualities of integrity defined for the National Register) by placing a new, distracting structure near the historic bridge, altering some cuts and fills associated with the highway, and changing the alignment, albeit slightly, from that of the 1928 – 1937 period of significance. Even if the new bridge were of a design type used during the period of significance of the historic bridge, it would constitute an element that did not exist within the footprint of the historic district during its period of significance. Determined eligible for listing in the National Register within the areas of engineering, architecture, and transportation, the Feather River Highway Historic District would suffer a reduction of its significance in the areas of engineering (alterations to the Spanish Creek Bridge and the highway) and architecture (alterations to the highway alignment). Such lessened integrity and significance for National Register purposes would constitute a use of the historic district.

Alternative B (Build new bridge and remove existing bridge)

Removal of the historic bridge constitutes an adverse effect upon the Feather River Highway Historic District due to a lessening of significance in the areas of engineering and architecture and similar lessening of the historical integrity of the historic district. The new bridge will constitute the insertion of an intrusive element into the historic district, and the removal of the historic bridge will represent the loss of a contributing element to the significance of the Feather River Highway Historic District. All seven of the qualities of integrity considered by the National Register will be affected in adverse ways. Therefore, an adverse effect and use of the historic district will result.

Alternative C (Rehabilitate existing bridge)

The Spanish Creek Bridge is but one of seven major bridges within the Feather River Highway Historic District. During the period of 2003 to 2006, Caltrans initiated a project to seismically retrofit and strengthen (rehabilitate) five of those bridges. Modest modifications resulted in a determination of no adverse effect under a Programmatic Agreement between the SHPO, FHWA, the Advisory Council on Historic Preservation, and Caltrans relative to the seismic retrofit of bridges. The previous project included engineered plans which minimized physical modifications to the bridges, including the use of like materials and limiting changes to the physical

attributes of the structure to the extent possible, thereby avoiding an adverse effect or use of the Feather River Highway Historic District. Therefore, given that Caltrans has successfully designed and implemented prior bridge rehabilitation projects and avoided an adverse effect or use of the highway historic district, it would seem that the currently proposed bridge rehabilitation project could be designed to avoid a use of the Feather River Highway Historic District.

Alternative D (No Build)

Alternative D would entail that the existing bridge would be maintained and substantial improvements would not be made, thereby avoiding an immediate use of the Feather River Highway Historic District.

AVOIDANCE ALTERNATIVES FOR THE FEATHER RIVER HIGHWAY HISTORIC DISTRICT

An avoidance alternative must be prudent and feasible to be considered for implementation. An alternative is feasible if it can be constructed based on accepted engineering principles. The following six-factor test was applied pursuant to 23 CFR 774.117 in determining whether an alternative would be prudent:

1. Compromises the project so that it is unreasonable given the purpose and need;

2. Results in unacceptable safety or operational problems;

3. After reasonable mitigation, still causes:

    - Severe social, economic, or environmental impacts;

    - Severe disruption to established communities;

    - Severe environmental justice impacts; or

    - Severe impacts to other federally protected resources.

4. Results in construction, maintenance, or operational costs of an extraordinary magnitude;

    - Consider factors such as: the percentage difference in the costs of the alternatives; how the cost difference relates to the total cost of similar transportation projects in the applicant's annual budget; and the extent to which the increased cost for the project would

adversely impact the applicants' ability to fund other transportation projects.

5. Causes other unique problems or unusual factors; or

6. Involves multiple factors listed above that while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

Alternative A (Build new bridge and seismic retrofit existing bridge)

Alternative A would impose a new bridge immediately adjacent to the new bridge and realign the highway. The new bridge would not be associated with the historic period of the Feather River Highway Historic District. As a result, the district's historical integrity would be degraded by altering the functional description of the historic bridge, thereby limiting or removing entirely its role as a contributing element to the historical significance of the Feather River Highway Historic District. Alternative A does not avoid a use of the historic district.

Alternative B (Build new bridge and remove existing bridge)

Alternative B will impose a new bridge not associated with the historic period of the Feather River Highway Historic District, removal of the Spanish Creek Bridge and realignment of the highway. Therefore, the district's historical integrity would be degraded by removing this historic bridge, thereby removing entirely its role as a contributing element to the historical significance of the Feather River Highway Historic District. Alternative B does not avoid an adverse effect or use of the historic district.

Alternative C (Rehabilitate existing bridge)

Alternative C is feasible to implement and would avoid use of the Feather River Highway Historic District; however, it is not a prudent avoidance alternative because it falls within factors 1 and 2 of the six-factor test. Implementation of Alternative C would not be a reasonable course of action because it would not fully address the project purpose and need (Factor 1) and it would result in unacceptable safety and operational problems (Factor 2).

The bridge rehabilitation alternative would not entirely address fatigue cracks and distortion in the steel members, which are present throughout the structure due to its age. The bridge is near the end of its fatigue service life and is currently classified as fracture critical. It is estimated that Alternative C would extend the service life of the structure up to 25 years, after which time another major rehabilitation project would be necessary.

In addition, the rehabilitation would not address the nonstandard width of the existing bridge deck. Rehabilitation and maintenance of the existing structure would require extra safety precautions due to the narrow width of the deck.

Alternative D (No Build)

Alternative D would avoid use of the Feather River Highway Historic District and is feasible to implement, but would not be a prudent avoidance alternative because it falls within factors number 1 and 2. Implementation of Alternative D would not be a reasonable course of action because it would not address the project purpose and need (Factor 1) and it would result in unacceptable safety and operational problems (Factor 2). This alternative would not address fatigue cracks and distortion in the steel members, which are present throughout the structure due to its age. Calculations show that the bridge is at or near the end of its fatigue service life. The bridge is currently classified as fracture critical. Also, it would not eliminate the width and weight limit issues. Restrictions on permit loads would continue; therefore, transportation needs of the public, industry, and emergency response personnel would not be met. In addition, maintenance of the existing structure would require extra safety precautions due to the narrow width of the existing bridge deck.

MEASURES TO MINIMIZE HARM TO THE FEATHER RIVER HIGHWAY HISTORIC DISTRICT

Alternative A (Build new bridge and seismic retrofit existing bridge)

Alternative A would impose a new bridge not associated with the historic period of the Feather River Highway Historic District. Therefore, the district's historical integrity would be lessened to some degree. Caltrans has entered into an MOA with the SHPO to resolve adverse effects to historic properties resulting from the project. Under the terms of the MOA Caltrans would prepare a permanent record of the Spanish Creek Bridge, which is a contributing element of the Feather River Highway Historic District, in accordance with Historic American Engineering Record (HAER) procedures and guidelines. Some of that record will be made immediately available to the traveling public through an interpretive display that is also called for by the MOA.

Alternative B (Build new bridge and remove existing bridge)

Alternative B will impose a new bridge not associated with the historic period of the Feather River Highway Historic District. Therefore, the district's historical integrity will be lessened to some degree. Caltrans has entered into an MOA with the SHPO to resolve adverse effects to historic properties resulting from the project. Under the

terms of the MOA Caltrans will prepare a permanent record of the Spanish Creek Bridge, which is a contributing element of the Feather River Highway Historic District, in accordance with Historic American Engineering Record (HAER) procedures and guidelines. Some of that record will be made immediately available to the traveling public through an interpretive display that is also called for by the MOA.

Alternative C (Rehabilitate existing bridge)

The bridge rehabilitation effort would be designed to minimize substantial alteration of the bridge's appearance. . Although the basic rehabilitation project would only forestall a more significant rehabilitation effort or complete bridge replacement, it would minimize harm to the integrity of the Feather River Highway Historic District.

Alternative D (No build)

With Alternative D, the existing bridge would be maintained and substantial improvements will not be made. Therefore, no measures to minimize harm would be required as this Alternative avoids an immediate use of the Feather River Highway Historic District.

COORDINATION RELATIVE TO THE FEATHER RIVER HIGHWAY HISTORIC DISTRICT

SHPO consultation began with the submittal of an HPSR and supporting technical studies in December 2005. The Feather River Highway Historic District was determined eligible for the National Register through the consensus process on April 16, 1987 under Criteria A and C. The SHPO concurred with the eligibility determinations in letters dated February 9, 2006 and May 3, 2006.

Caltrans found that the proposed bridge replacement project would have an adverse effect upon the Feather River Highway Historic District due to the potential removal of the Spanish Creek Bridge, a contributive element of the historic district, and the realignment that would result from construction of a new bridge. The Finding of Effects report was submitted to the SHPO on October 30, 2006. The SHPO issued a letter concurring with Caltrans findings on May 7, 2007.

Caltrans provided copies of the draft Section 4(f) Evaluation, appended to the draft Environmental Assessment, to the DOI during the public circulation period. One paper copy and 12 copies on compact disc were forwarded to the DOI on January 3, 2007 for review and comment pursuant to 23 CFR 771.135(i). Comments on the draft Section 4(f) Evaluation were requested by the close of the public review period, February 23, 2007. The DOI issued a letter on April 18, 2007 with the following recommendations: "since SR-70 transits considerable area within Plumas National

Forest, it may be desirable to contact their staff to determine if they may have any concerns." And "To avoid or minimize affecting this contributing element [Spanish Creek Bridge] to the Historic District, consultation with the State Historic Preservation Office should be completed prior to selecting a final design or finalizing commitments for measures to minimize harm." The letter also indicated that no responses or comments had been received from any other Department of the Interior bureaus or offices.

In order to address the adverse effect of the project, Caltrans entered into a MOA with the SHPO in accordance with 36 CFR 800 (Section 106) on July 28, 2008.

LEAST HARM ANALYSIS AND CONCLUDING STATEMENT REGARDING THE FEATHER RIVER HIGHWAY HISTORIC DISTRICT

The least harm analysis is based on a comparison of each project alternative in relation to the following factors:

1. Ability to mitigate adverse impacts to each Section 4(f) resource;
2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features;
3. Relative significance of each Section 4(f) resource;
4. Views of the officials with jurisdiction over each Section 4(f) property;
5. Degree to which each alternative meets the purpose and need;
6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f); and
7. Substantial differences in costs among alternatives.

<u>Alternative A (Build New Bridge and Seismic Retrofit Existing Bridge)</u>

1. Ability to mitigate adverse impacts to each Section 4(f) resource: Mitigation would consist of HAER recordation of the Spanish Creek Bridge, which is a contributing element of the Feather River Highway Historic District, and installation of an informational kiosk in the vicinity of the bridge with interpretive information pertaining to the Feather River Highway Historic District.
2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features: Although the existing bridge would remain

in place, the setting would be changed considerably due to the shift in highway alignment, introduction of a new structure in close proximity to the historic bridge, and change in function of the existing bridge. Further, the new bridge, even if it were a design type used during the period of significance of the bridge, would constitute an element that did not exist within the viewscape of the historic bridge and historic district during its period of significance. As a result, the historic integrity of the Feather River Highway Historic District could be affected in the qualities of setting, feeling, and association.

3. Relative significance of each Section 4(f) resource: The Feather River Highway Historic District was determined eligible for listing in the National Register in April 1987 under Register Criteria A and C at the statewide level of significance in the areas of architecture, engineering, and transportation.

4. Views of the officials with jurisdiction over each Section 4(f) property: The SHPO concurs with the proposal to replace the existing structure and mitigation to resolve the adverse effects of the undertaking.

5. Degree to which each alternative meets the purpose and need: Alternative A satisfies the project purpose and need, but does not address the fact that the existing bridge is fracture critical. The bridge would require continued maintenance and additional retrofit work on steel members in the future.

6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f): The project will result in temporary effects upon the environment due to the removal of vegetation and earth disturbance associated with construction access and staging. However, with this alternative, there are no adverse impacts to resources not protected by Section 4(f).

7. Substantial differences in costs among alternatives: The estimated cost to construct Alternative A is reported in the 2003 Project Scope Summary Report as $29.2 million versus $21.3 million for Alternative B and $10.5 million for Alternative C. In addition, with Alternative A, the existing (historic) bridge would remain in place, requiring ongoing maintenance costs for the painted finish and future rehabilitation efforts to address the continued deterioration (fatigue) of the structural steel.

Alternative B (Build New Bridge and Remove Existing Bridge)

1. Ability to mitigate adverse impacts to each Section 4(f) resource: Mitigation will consist of HAER recordation of the Spanish Creek Bridge, which is a contributing element of the Feather River Highway Historic District, and installation of an informational kiosk in the vicinity of the bridge with interpretive information pertaining to the Feather River Highway Historic District.

2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features: The bridge and adjoining sections of highway will no longer exist with this alternative.

3. Relative significance of each Section 4(f) resource: The Feather River Highway Historic District was determined eligible for listing in the National Register in April 1987 under Register Criteria A and C at the statewide level of significance in the areas of architecture, engineering, and transportation.

4. Views of the officials with jurisdiction over each Section 4(f) property: The SHPO concurs with the proposal to replace the existing structure and mitigation to resolve the adverse effects of the undertaking.

5. Degree to which each alternative meets the purpose and need: Alternative B best meets the project purpose and need because it will provide a low maintenance structure that meets regional transportation needs.

6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f): The project will result in temporary effects upon the environment due to the removal of vegetation and earth disturbance associated with construction access and staging. However, with this alternative, there are no adverse impacts to resources not protected by Section 4(f).

7. Substantial differences in costs among alternatives: The estimated cost of Alternative B is reported in the 2003 Project Scope Summary Report as $21.3 million versus $29.2 million for Alternative A and $10.5 million for Alternative C. The existing bridge would be removed thereby eliminating the need for additional maintenance and a future project to address the deteriorating structural steel.

Alternative C Rehabilitate Existing Bridge

1. Ability to mitigate adverse impacts to each Section 4(f) resource: To avoid a use of the historic district, it would be necessary to incorporate design measures which utilize like materials and minimize physical alterations of the bridge to the extent possible, i.e., use design features similar to those utilized for the previous rehabilitation of the five other major bridges within the Feather River Highway Historic District. Although efforts would be made to minimize alterations to the Spanish Creek Bridge, which is a contributing element of the Feather River Highway Historic District, the historic integrity of the Feather River Highway Historic District may still be still be lost in the process.

2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features: Although efforts would be made to minimize alterations to the Spanish Creek Bridge, which is a contributing element of the Feather River Highway Historic District, the historic integrity of the Feather River Highway Historic District may still be still be lost in the process. It is estimated that a rehabilitation project would prolong the bridge's operational lifespan an estimated 25 years. Additional modifications would be necessary after that timeframe. Over time, it would be necessary to replace essentially all of the steel within the structure. Future rehabilitation efforts would face the same construction access and staging requirements as the currently proposed project, i.e., use of the public recreation area and Spanish Creek Campground.

3. Relative significance of each Section 4(f) resource: The Feather River Highway Historic District was determined eligible for listing in the National Register in April 1987 under Register Criteria A and C at the statewide level of significance in the areas of architecture, engineering, and transportation.

4. Views of the officials with jurisdiction over each Section 4(f) property: The SHPO concurs with the proposal to replace the existing structure and mitigation to resolve the adverse effects of the undertaking. In addition, the SHPO concurs that Alternative A would result in an adverse effect to historic properties.

5. Degree to which each alternative meets the purpose and need: This alternative does not meet the project purpose and need because it does not replace the fatigued steel in its entirety. In addition, it does not address the width limitations of the existing bridge.

6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f): The project will result in temporary effects upon the environment due to the removal of vegetation and earth disturbance associated with construction access and staging. However, with this alternative, there are no adverse impacts to resources not protected by Section 4(f).

7. Substantial differences in costs among alternatives: The estimated cost of Alternative C is reported in the 2003 Project Scope Summary Report as $10.5 million versus $29.2 million for Alternative A and $21.3 million for Alternative B. Alternative C would prolong the structure's life for approximately 25 years, at which time, another rehabilitation effort would be necessary to repair and replace other fatigued structural members.

Alternative D (No Build)

1. Ability to mitigate adverse impacts to each Section 4(f) resource: An immediate adverse effect or use of Section 4(f) resources would be avoided with the No Build Alternative.

2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features: There would be no harm to the Section 4(f) resource.

3. Relative significance of each Section 4(f) resource: The Feather River Highway Historic District was determined eligible for listing in the National Register in April 1987 under Register Criteria A and C at the statewide level of significance in the areas of architecture, engineering, and transportation.

4. Views of the officials with jurisdiction over each Section 4(f) property: There would be no use of Section 4(f) properties: The SHPO concurs with the proposal to replace the existing structure and mitigation to resolve the adverse effects of the undertaking.

5. Degree to which each alternative meets the purpose and need: Alternative D is the "No Build" alternative, which does not address the project purpose and need. Under this alternative, the existing bridge would be maintained and substantial improvements would not be made. The structural integrity of the bridge would continue to deteriorate and permit loads would continue to be limited due to the width and weight capacity of the bridge. Maintenance costs would increase, weight loads of vehicles could be further restricted in the future, and eventually the bridge would need to be closed to traffic.

6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f): Restrictions would remain on vehicle loads due to weight and width limitations of the existing bridge. This could result in potential social and economic impacts due to restrictions on commercial and emergency response equipment, e.g., railroad and utility repair equipment, and fire suppression equipment, in the future.

7. Substantial differences in costs among alternatives: Alternative D would incur costs for maintenance of the steel paint finish and periodic inspections of the steel superstructure. In addition, this alternative would only delay the eventual rehabilitation or replacement of the bridge.

In summary, Alternative A meets the project purpose and need by providing a new modern bridge. However, even though the existing bridge would remain in place, the eligibility of the Feather River Highway Historic District would be adversely affected due to the realignment of a portion of the highway and the placement of a new bridge adjacent to the existing bridge. In addition, Alternative A would still require additional maintenance of the existing bridge.

Alternative B will provide a modern, low maintenance bridge that accommodates regional transportation needs. Removal of the existing bridge will eliminate costs associated with the maintenance or subsequent rehabilitation work on the historic structure and the necessity to utilize the PNF public recreation area and campground for construction access and staging. In addition, it will enable timely improvement of the highway system and proper documentation of the historic bridge, which is a contributing element of the Feather River Highway Historic District, through HAER recordation while the bridge is relatively unaltered.

Alternative C does not satisfy the project purpose and need because it would not replace the fatigued steel in its entirety. Successive rehabilitation efforts or future bridge replacement would be necessary. In addition, Alternative C would not address the lack of standard shoulders on the existing bridge.

Alternative D would avoid an immediate use of the Feather River Highway Historic District. However, this alternative does not meet the project purpose and need because it does not address the fact that the bridge's steel superstructure is fracture critical and the bridge is unable to accommodate oversize vehicle permit loads.

Based on the above considerations, there is no feasible and prudent alternative to the use of land from the Feather River Highway Historic District. The proposed action includes all possible planning to minimize harm to the Feather River Highway

Historic District resulting from such use and causes the least overall harm in light of the statute's preservation purpose.

IMPACTS TO THE PLUMAS NATIONAL FOREST RECREATION AREA

Implementation of Alternative A, B, or C, all of which entail major bridge construction, would result in a use of the recreation area, which includes the Spanish Creek Campground. The Spanish Creek Campground entrance, located near the northwest quadrant of the bridge, provides a paved access road into the campground and surrounding recreation area. The road leads into the campground and a cull de-sac at the northern bank of Spanish Creek approximately 950 feet downstream of the bridge. The topography on the opposite (south) side of the creek beyond the floodplain is level and wide enough to provide access northerly to the bridge site. The most cost effective and least environmentally damaging method of access would be to utilize the campground road and construct a creek crossing at the end of the campground road. The access road would be utilized for the transport of equipment, materials, and workers to and from the construction site. For maximum construction efficiency and to provide public and worker safety, the recreation area, including the Spanish Creek Campground, should be closed to the public for the duration of major construction operations. Construction staging areas would be developed below the existing and proposed bridges on each side of the creek. Another at-grade stream crossing would likely be constructed at the bridge site. Typical equipment and materials include large cranes, which would be left in place near the bridge(s), cement trucks, drill rigs, flatbed trucks with rebar, graders, bulldozers, loaders, and dump trucks. The access road would be used on a daily basis. For a complete project description, see Section 1.3 in the Final EIR/EA.

Such a long-term impact to the recreation area, including the Spanish Creek Campground (approximately three years) would be considered a "use" under Section 4(f) Guidelines.

Impacts that cannot be avoided include the following:

- The loss of campground revenue for a minimum of three years during which time the campground will be closed. This includes the loss of recreational day-use and camping opportunities, and rebuilding the patronage established since the Spanish Creek Campground opened in 2004;

- Adverse change in the setting of the recreation area, including the Spanish Creek Campground due to the removal of mature trees and alteration of the landscape to accommodate construction access and

staging. Construction scars and a reduction in the amount of mature vegetation will be notable to users of the recreation area and campground;

- Loss of approximately 1.7 acres at the entrance to the Spanish Creek Campground due to a permanent shift in the highway alignment to connect to the new bridge.

Alternative D (No Build)

Alternative D would not result in a use of the recreation area, which includes the Spanish Creek Campground.

AVOIDANCE ALTERNATIVES FOR THE PLUMAS NATIONAL FOREST RECREATION AREA

An avoidance alternative must be prudent and feasible to be considered for implementation. An alternative is feasible if it can be constructed based on accepted engineering principles. The following six-factor test was applied pursuant to 23 CFR 774.117 in determining whether an alternative would be prudent:

1. Compromises the project so that it is unreasonable given the purpose and need;

2. Results in unacceptable safety or operational problems;

3. After reasonable mitigation, still causes:

    - Severe social, economic, or environmental impacts;

    - Severe disruption to established communities;

    - Severe environmental justice impacts; or

    - Severe impacts to other federally protected resources.

4. Results in construction, maintenance, or operational costs of an extraordinary magnitude;

    - Consider factors such as: the percentage difference in the costs of the alternatives; how the cost difference relates to the total cost of similar transportation projects in the applicant's annual budget; and the extent to which the increased cost for the project would

adversely impact the applicants' ability to fund other transportation projects;

5. Causes other unique problems or unusual factors; or

6. Involves multiple factors listed above that while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

All of the project alternatives, except Alternative D, would result in a use of the recreation area, which includes the Spanish Creek Campground. Based upon the following, Alternatives A, B, and C would not avoid use of the recreation area and Spanish Creek Campground. Alternatives A, B and C would require use of the recreation area and campground to gain access to the area beneath the bridge. Construction staging areas, from which cranes could operate, would be located at each corner of the bridge at highway elevation and beneath the bridge at stream elevation. The primary construction staging area would be situated beneath the bridge. Given the depth and required span of the highway crossing, construction from the highway elevation only, without a staging area below the bridge, is not an option. Because a crane is capable of performing only one task at a time, a crane working from highway elevation would be inefficient as the primary method of transferring equipment and materials to the area beneath the bridge. In addition, cranes typically used in this type of bridge construction (230 ton crane) would not have the reach and lifting capability needed to construct the bridge from above. A crane large enough to perform this work (835 ton crane) is not standard for this type of project and would limit the number of qualified contractors. In addition to the extra cost for the large crane, estimated at $2.2 million, additional expenses and time would be required for mobilization and set-up.

Substantial amounts of materials would be delivered to the construction staging area, including concrete, lumber, and reinforcing steel. In addition, equipment such as cranes, excavators, and concrete trucks would need to gain access to, and operate from, the main staging area beneath the bridge. Methods of accessing the area beneath the bridge are limited. Construction of a temporary access road from the highway elevation is not feasible due to steep terrain and limited area. Based on an assessment of potential access points at each corner of the bridge, it was determined that it would not be feasible to construct an access road with grades and turning radii necessary to accommodate various types of construction vehicles. Natural barriers include the steep terrain, railroad, highway, and Spanish Creek.

In addition, Alternatives A and B would require the acquisition of approximately 1.7 acres of land from the public recreation area to accommodate the shift in roadway alignment needed for the new bridge.

Alternative D (No Build)

Alternative D would avoid use of the recreation area, which includes the Spanish Creek Campground. However, this alternative does not address the project purpose and need. Alternative D would not be a prudent avoidance alternative because it falls within factors number 1 and 2. Implementation of Alternative D would not be a reasonable course of action because it would not address the project purpose and need (Factor 1) and it would result in unacceptable safety and operational problems (Factor 2). This alternative would not address fatigue cracks and distortion in the steel members, which are present throughout the structure due to its age. Calculations show that the bridge is at or near the end of its service life. The bridge is currently classified as fracture critical. Also, it would not eliminate the width and weight limit issues. Restrictions on permit loads would continue, therefore, transportation needs of the public, industry, and emergency response personnel would not be met. In addition, maintenance of the existing structure would require extra safety precautions due to the narrow width of the existing bridge deck.

MEASURES TO MINIMIZE HARM TO THE PLUMAS NATIONAL FOREST RECREATION AREA

Alternatives A, B, and C would each entail similar use of the Plumas National Forest Recreation Area, including the Spanish Creek Campground, for temporary construction access and staging. The following measures to minimize harm would be implemented regardless of the alternative selected:

- The recreation area, including the Spanish Creek Campground, would be closed during construction to protect the safety of the public;
- Construction storage and staging would occur only within those areas designated on the project plans;
- Mature trees adjacent to SR 70 near the entrance to the Spanish Creek Campground, will be preserved to the extent possible. Groups of trees that would not impose constraints for construction would be designated as ESA's and delineated with temporary fencing;
- Following construction, all disturbed areas within the recreation area would be stabilized with erosion control seeding. Pavement and infrastructure damaged as a result of Caltrans' project would be repaired;
- An informational sign would be installed at the campground entrance to inform the public about the bridge replacement or rehabilitation project;

- Compensation in the amount of $870,000 would be provided to PNF for use of the recreation area, including the Spanish Creek Campground, for a period of three years. PNF desires monetary compensation, which could be used to make improvements to the remaining recreation property. Caltrans and PNF agree that this compensation would make PNF whole and the amount of compensation is a reasonable public expenditure in light of the severity of the impacts to the qualifying Section 4(f) property.

Alternative D (No Build)

With Alternative D the existing bridge would be maintained and substantial improvements would not be made. Therefore, no measures to minimize harm would be required as this Alternative avoids a use of the recreation area, which includes the Spanish Creek Campground.

COORDINATION RELATIVE TO THE PLUMAS NATIONAL FOREST RECREATION AREA

Early coordination with PNF began in 2003 due to the proximity of public recreation land relative to the project and the need to acquire temporary and/or permanent right-of-way on public recreation land. Following is a summary of meetings between Caltrans and PNF during the project development process:

- March 21, 2003 and July 22, 2003, meetings were held at the PNF Mount Hough Ranger District Office (Mt. Hough) near Quincy. The meetings were attended by Caltrans and PNF staff. The purpose of the meetings was to present the project purpose and need, project schedule, and discuss responsibilities and coordination protocol for complying with the NEPA;

- July 20, 2004, meeting at Mt. Hough, attended by Caltrans and PNF. Major points covered in the meeting include the following: PNF considers the public recreation land, including the campground, a “significant” resource in terms of Section 4(f), anticipated level of NEPA compliance and agency roles (Caltrans is the lead agency and PNF is a cooperating agency), project scope and potential impacts relative to public recreation area, and possible measures to minimize impacts to recreation and campground activities;

- March 15, 2005, meeting at Spanish Creek Bridge (project site), attended by Caltrans and PNF. This meeting was to discuss construction access and staging needs, potential impacts to the public recreation area, including the Spanish Creek Campground, and measures to avoid and minimize impacts to the property. PNF would need to decide whether the recreation area,

including the campground, would be made available for temporary construction use and what restrictions would apply, e.g., duration of use, period of use by construction, and would the property remain open for public use or would it be closed for the duration of construction;

- March 22, 2005, meeting at Mt. Hough, attended by Caltrans, PNF and FHWA. Caltrans Structures Construction discussed the necessity of utilizing the campground access road and recreation area for construction access and staging. The discussion focused on whether the recreation area and campground should remain open, fully or partially, during construction or should it be closed. Also, discussed was Section 4(f) use and possible compensation. PNF indicated no interest in taking ownership of the Spanish Creek Bridge if a new bridge was constructed and the existing bridge was left in place. As a result of this meeting, PNF issued a letter on October 14, 2005 formally notifying Caltrans that PNF desires that the Spanish Creek Campground remain open during construction. The PNF District Ranger recommended: "We [PNF] shorten the campground operation from Memorial Day weekend to Labor Day weekend, and allow Caltrans controlled access through the campground while it is open. Controlled access could include traffic control and limited or no work during the weekends and definitely no work during the three major holiday weekends.";

- December 13, 2005, meeting at Mt. Hough, attended by Caltrans and PNF. The discussion focused on the construction process and measures to minimize impacts to the public recreation area and campground; compensation and post-construction restoration of the recreation land was also discussed;

- March 6, 2006, meeting at Mt. Hough, attended by Caltrans and PNF. The discussion focused on measures to minimize impacts to the public recreation area and campground during construction, post-construction restoration of the property, and compensatory mitigation;

- September 7, 2006, meeting at Mt. Hough, attended by Caltrans and PNF. The purpose of the meeting was to discuss proposed compensation for impacts to public recreation land and other Section 4(f) properties, and measures to minimize harm to public recreation lands during construction;

- April 12, 2007, meeting at Mt. Hough, attended by Caltrans and PNF. The purpose of the meeting was to discuss proposed compensation for impacts to public recreation land and other Section 4(f) properties, and measures to minimize harm to public recreation lands during construction. In addition, the

draft MOA to resolve adverse effects upon historic properties was delivered to PNF for their review. PNF is a concurring party to the MOA;

- September 12, 2007, meeting at Mt. Hough, attended by Caltrans and PNF. Discussed need for unanticipated overhead utility relocation; requested PNF's delineation of recreation area and campground boundary; and placement of interpretive mitigation feature on PNF land to resolve adverse effects to historic properties.

On February 27, 2008, PNF issued a letter to Caltrans confirming that the public recreation area, which includes the Spanish Creek Campground, is a significant resource in terms of Section 4(f). The letter also confirmed the following: the boundary of the recreation area and campground; the campground will be closed during the three year construction period; measures to minimize harm to the recreation area; impacts to the recreation area which cannot be avoided; and the desired monetary compensation to make PNF whole. A copy of the letter is attached to this Section 4(f) Evaluation.

LEAST HARM ANALYSIS AND CONCLUDING STATEMENT REGARDING THE PLUMAS NATIONAL FOREST RECREATION AREA

The least harm analysis is based on a comparison of each project alternative in relation to the following factors:

1. Ability to mitigate adverse impacts to each Section 4(f) resource;
2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features;
3. Relative significance of each Section 4(f) resource;
4. Views of the officials with jurisdiction over each Section 4(f) property;
5. Degree to which each alternative meets the purpose and need;
6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f); and
7. Substantial differences in costs among alternatives.

Alternative A (Build New Bridge and Seismic Retrofit Existing Bridge)

1. Ability to mitigate adverse impacts to each Section 4(f) resource: All adverse impacts will be mitigated. See measures described in the Measures to Minimize Harm for the PNF Recreation Area Section above.

2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features: As set forth in the February 27, 2008 letter from PNF, implementation of the measures described therein will mitigate all harm as result of the project.

3. Relative significance of each Section 4(f) resource: PNF has confirmed that the public recreation area, which includes the Spanish Creek Campground, is a significant resource relative to Section 4(f).

4. Views of the officials with jurisdiction over each Section 4(f) property: PNF concurs with the need for a new bridge and that there are no prudent and feasible alternatives to the use of public recreation land.

5. Degree to which each alternative meets the purpose and need: Alternative A satisfies the project purpose and need, but does not address the fact that the existing bridge is fracture critical. The bridge would require continued maintenance and subsequent restoration work in the future to repair or replace steel members. The restoration work would require access and staging from within the public recreation area and campground.

6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f): The project will result in temporary effects upon the environment due to the removal of vegetation and earth disturbance associated with construction access and staging. However, with this alternative, there are no adverse impacts to resources not protected by Section 4(f).

7. Substantial differences in costs among alternatives: The estimated cost to construct Alternative A is reported in the 2003 Project Scope Summary Report as $29.2 million versus $21.3 million for Alternative B and $10.5 million for Alternative C. In addition, with Alternative A, the existing (historic) bridge would remain in place, requiring ongoing maintenance costs for the painted finish and future rehabilitation efforts to address the continued deterioration (fatigue) of the structural steel.

Alternative B (Build New Bridge and Remove Existing Bridge)

1. Ability to mitigate adverse impacts to each Section 4(f) resource: All adverse impacts will be mitigated. See measures described in the "Measures to Minimize Harm for the PNF Recreation Area" Section above.

2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features: As set forth in the February 27, 2008 letter from PNF, implementation of the measures described therein will mitigate all harm as result of the project.

3. Relative significance of each Section 4(f) resource: PNF considers the public recreation area, which includes the Spanish Creek Campground, to be a significant resource relative to Section 4(f).

4. Views of the officials with jurisdiction over each Section 4(f) property: PNF concurs with the need for a new bridge and that there are no prudent and feasible alternatives to the use of the recreation area, which includes the Spanish Creek Campground.

5. Degree to which each alternative meets the purpose and need: Alternative B best meets the project purpose and need because it provides a low maintenance modern structure that meets regional transportation needs.

6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f): The project will result in temporary effects upon the environment due to the removal of vegetation and earth disturbance associated with construction access and staging. However, with this alternative, there are no adverse impacts to resources not protected by Section 4(f).

7. Substantial differences in costs among alternatives: The estimated cost of Alternative B is reported in the 2003 Project Scope Summary Report as $21.3 million versus $29.2 million for Alternative A and $10.5 million for Alternative C. The existing bridge would be removed thereby eliminating the need for additional maintenance and a future project to address the deteriorating structural steel.

Alternative C Rehabilitate Existing Bridge

1. Ability to mitigate adverse impacts to each Section 4(f) resource: Adverse impacts will be mitigated. See measures described in the "Measures to Minimize Harm for the PNF Recreation Area" Section above.

2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features: As set forth in the February 27, 2008 letter from PNF, implementation of the measures described therein will mitigate all harm as result of the project.

3. Relative significance of each Section 4(f) resource: PNF considers the public recreation area, which includes the Spanish Creek Campground, to be a significant resource.

4. Views of the officials with jurisdiction over each Section 4(f) property: PNF concurs with the need for a new bridge and that there are no prudent and feasible alternatives to the use of public recreation land.

5. Degree to which each alternative meets the purpose and need: This alternative does not meet the project purpose and need because it does not replace the fatigued steel in its entirety. In addition, it does not address the width limitations of the existing bridge.

6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f): The project will result in temporary effects upon the environment due to the removal of vegetation and earth disturbance associated with construction access and staging. However, with this alternative, there are no adverse impacts to resources not protected by Section 4(f).

7. Substantial differences in costs among alternatives: The estimated cost of Alternative C is reported in the 2003 Project Scope Summary Report as $10.5 million versus $29.2 million for Alternative A and $21.3 million for Alternative B. Alternative C would prolong the structure's life for approximately 25 years. At that point, another rehabilitation effort would be necessary to repair and replace other fatigued structural members.

<u>Alternative D (No Build).</u>

1. Ability to mitigate adverse impacts to each Section 4(f) resource: An immediate adverse effect or use of Section 4(f) resources would be avoided with the No Build Alternative.

2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features: There would be no harm to the Section 4(f) resource.

3. Relative significance of each Section 4(f) resource: PNF considers the public recreation area, which includes the Spanish Creek Campground, to be a significant resource.

4. Views of the officials with jurisdiction over each Section 4(f) property: PNF concurs with the need for a new bridge and that there are no prudent and feasible alternatives to the use of public recreation land.

5. Degree to which each alternative meets the purpose and need: Alternative D is the "No Build" alternative, which does not address the project purpose and need. Under this alternative, the existing bridge would be maintained and substantial improvements would not be made. The structural integrity of the bridge would continue to deteriorate and permit loads would continue to be limited due to the width and weight capacity of the bridge. Maintenance costs would increase, weight loads of vehicles could be further restricted in the future, and eventually the bridge would need to be closed to traffic.

6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f): Restrictions would remain on vehicle loads due to weight and width limitations of the existing bridge. This could result in potential social and economic impacts due to restrictions on commercial and emergency response equipment, e.g., railroad and utility repair equipment, and fire suppression equipment, in the future.

7. Substantial differences in costs among alternatives: Alternative D would incur costs for maintenance of the steel paint finish and periodic inspections of the steel superstructure. In addition, this alternative would only delay the eventual rehabilitation or replacement of the bridge.

In summary, Alternative A meets the project purpose and need by providing a new modern bridge. Alternative A would still require additional maintenance of the existing Spanish Creek Bridge, and as a result, utilization of the recreation area, which includes the campground, for construction access and staging may be required.

Alternative B will provide a modern, low maintenance bridge that accommodates regional transportation needs. Removal of the existing bridge will eliminate costs associated with the maintenance or subsequent rehabilitation work on the historic structure and the necessity to utilize the PNF public recreation area and campground for construction access and staging. In addition, it will enable timely improvement of the highway system and proper documentation of the historic bridge through HAER recordation while the bridge is relatively unaltered.

Alternative C does not satisfy the project purpose and need because it would not replace the fatigued steel in its entirety. Successive rehabilitation efforts or future bridge replacement would be necessary, as well as the need for construction access and staging within the public recreation area and Spanish Creek Campground. In addition, Alternative C would not address the lack of standard shoulder width on the existing bridge.

Alternative D would avoid a use of the recreation area, which includes the Spanish Creek Campground. However, this alternative does not meet the project purpose and need because it does not address the fact that the bridge's steel superstructure is fracture critical and the bridge is unable to accommodate oversize vehicle permit loads.

Based on the above considerations, there is no feasible and prudent alternative to the use of land from the recreation area, which includes the Spanish Creek Campground, and the proposed action includes all possible planning to minimize harm to the recreation area, which includes the Spanish Creek Campground, resulting from such use and causes the least overall harm in light of the statute's preservation purpose.

IMPACTS TO THE MAXWELL DITCH SEGMENT

Alternative A (Build new bridge and seismic retrofit existing bridge)

Alternative A would require removal of a portion of the hillside at the southwest corner of the Spanish Creek Bridge for equipment positioning and access. This would remove some fifty feet from an isolated segment of a historic mining ditch known as the Maxwell Ditch. This isolated segment can be described as having a high degree of historical integrity in that it is clearly discernible as a ditch, albeit made shallow by the infusion of duff and earth due to natural erosion. The Maxwell Ditch segment will be assumed eligible for the National Register and will be treated as such for purposes of the proposed project. Impacts to the ditch segment would be to its integrity in the form of removal of that fifty foot length. Thus, a use of this isolated segment of the Maxwell Ditch would result.

Alternative B (Build new bridge and remove existing bridge)

Alternative B will require removal of a portion of the hillside at the southwest corner of the Spanish Creek Bridge for equipment positioning and access. This will remove some fifty feet from an isolated segment of a historic mining ditch known as the Maxwell Ditch. This isolated segment can be described as having a high degree of historical integrity in that it is clearly discernible as a ditch, albeit made shallow by the

infusion of duff and earth due to natural erosion The Maxwell Ditch segment will be assumed eligible for the National Register and will be treated as such for purposes of the proposed project. Impacts to the ditch segment will be to its integrity in the form of removal of that fifty foot length. Thus, a use of this isolated segment of the Maxwell Ditch will result.

Alternative C (Rehabilitate existing bridge)

Alternative C would require removal of a portion of the hillside at the southwest corner of the Spanish Creek Bridge for equipment positioning and access. This would remove some fifty feet from an isolated segment of a historic mining ditch known as the Maxwell Ditch. This isolated segment can be described as having a high degree of historical integrity in that it is clearly discernible as a ditch, albeit made shallow by the infusion of duff and earth due to natural erosion. The Maxwell Ditch segment will be assumed eligible for the National Register and will be treated as such for purposes of the proposed project. Impacts to the ditch segment would be to its integrity in the form of removal of that fifty foot length. Thus, a use of this isolated segment of the Maxwell Ditch would result.

Alternative D (No build)

Alternative D would not impact this isolated segment of the Maxwell Ditch, nor result in a use of the Maxwell Ditch.

AVOIDANCE ALTERNATIVES FOR THE MAXWELL DITCH SEGMENT

An avoidance alternative must be prudent and feasible to be considered for implementation. An alternative is feasible if it can be constructed based on accepted engineering principles. The following six-factor test was applied pursuant to 23 CFR 774.117 in determining whether an alternative would be prudent:

1. Compromises the project so that it is unreasonable given the purpose and need;

2. Results in unacceptable safety or operational problems;

3. After reasonable mitigation, still causes:

    - Severe social, economic, or environmental impacts;

    - Severe disruption to established communities;

    - Severe environmental justice impacts; or

- Severe impacts to other federally protected resources;

4. Results in construction, maintenance, or operational costs of an extraordinary magnitude;

    - Consider factors such as: the percentage difference in the costs of the alternatives; how the cost difference relates to the total cost of similar transportation projects in the applicant's annual budget; and the extent to which the increased cost for the project would adversely impact the applicants' ability to fund other transportation projects.

5. Causes other unique problems or unusual factors; or

6. Involves multiple factors listed above that while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

Alternative A (Build New Bridge and Seismic Retrofit Existing Bridge)

Alternative A would require removal of a portion of the hillside at the southwest corner of the Spanish Creek Bridge for equipment positioning and access. This would remove some fifty feet from an isolated segment of a historic mining ditch known as the Maxwell Ditch. Therefore, this alternative would not avoid the Maxwell Ditch.

Alternative B (Build New Bridge and Remove Existing Bridge)

Alternative B will require removal of a portion of the hillside at the southwest corner of the Spanish Creek Bridge for equipment positioning and access. This will remove some fifty feet from an isolated segment of a historic mining ditch known as the Maxwell Ditch. Therefore, this alternative would not avoid the Maxwell Ditch.

Alternative C (Rehabilitate Existing Bridge)

Alternative C would require removal of a portion of the hillside at the southwest corner of the Spanish Creek Bridge for equipment positioning and access. This would remove some fifty feet from an isolated segment of a historic mining ditch known as the Maxwell Ditch. Therefore, this alternative would not avoid the Maxwell Ditch.

Alternative D (No Build)

Alternative D would be feasible to implement, but would not be a prudent avoidance alternative because it falls within factor numbers 1 and 2. Implementation of

Alternative D would not be a reasonable course of action because it would not address the project purpose and need (Factor 1) and it would result in unacceptable safety and operational problems (Factor 2). This alternative would not address fatigue cracks and distortion in the steel members, which are present throughout the structure due to its age. Calculations show that the bridge is at or near the end of its service life. The bridge is currently classified as fracture critical. Also, it would not eliminate the width and weight limit issues. Restrictions on permit loads would continue, therefore, transportation needs of the public, industry, and emergency response personnel would not be met. In addition, maintenance of the existing structure would require extra safety precautions due to the narrow width of the existing bridge deck.

MEASURES TO MINIMIZE HARM TO THE MAXWELL DITCH SEGMENT

Alternative A (Build New Bridge and Seismic Retrofit Existing Bridge)

Caltrans has entered into an MOA with the SHPO to resolve adverse effects to historic properties resulting from the project. Under the terms of the MOA, a kiosk would be installed in the vicinity of the bridge with interpretive information pertaining to the Maxwell Ditch segment.

Alternative B (Build New Bridge and Remove Existing Bridge)

Caltrans has entered into an MOA with the SHPO to resolve adverse effects to historic properties resulting from the project. Under the terms of the MOA Caltrans a kiosk would be installed in the vicinity of the bridge with interpretive information pertaining to the Maxwell Ditch segment.

Alternative C (Rehabilitate Existing Bridge)

Caltrans has entered into an MOA with the SHPO to resolve adverse effects to historic properties resulting from the project. Under the terms of the MOA a kiosk would be installed in the vicinity of the bridge with interpretive information pertaining to the Maxwell Ditch segment.

Alternative D (No Build)

With Alternative D the existing bridge would be maintained and substantial improvements would not be made. Therefore, no measures to minimize harm would be required as this Alternative avoids an immediate use of the Maxwell Ditch segment.

COORDINATION RELATIVE TO THE MAXWELL DITCH SEGMENT

SHPO consultation began with the submittal of an HPSR and supporting technical studies in December 2005. The SHPO, in its letter of February 9, 2008, stated that it was not able to concur with Caltrans' determination that the Maxwell Ditch segment was ineligible for listing in the National Register based on the information provided. The SHPO recommended, based on lack of a more complete context for the ditch segment's relevance to the Maxwell Ditch, as a whole, that Caltrans assume National Register eligibility of the ditch segment. Caltrans subsequently acknowledged acceptance of SHPO's recommendation by signing SHPO's letter of May 3, 2006 (Appendix G).

Caltrans elected to consider that the proposed project would have an adverse effect on the Maxwell Ditch segment and therefore, considered the potential historic property in determining mitigation for the effects of the project.

Caltrans provided copies of the draft Section 4(f) Evaluation, appended to the draft Environmental Assessment, to the DOI during the public circulation period. One paper copy and 12 copies on compact disc were forwarded to the DOI on January 3, 2007 for review and comment pursuant to 23 CFR 771.135(i). Comments on the draft Section 4(f) Evaluation were requested by the close of the public review period, February 23, 2007. The DOI issued a letter on April 18, 2007 with the following recommendations: "Since SR-70 transits considerable area within Plumas National Forest, it may be desirable to contact their staff to determine if they may have any concerns. And "To avoid or minimize affecting this contributing element [Spanish Creek Bridge] to the Historic District, consultation with the State Historic Preservation Office should be completed prior to selecting a final design or finalizing commitments for measures to minimize harm." The letter also indicated that no responses or comments had been received from any other Department of the Interior bureaus or offices.

In order to address the adverse effect of the project, Caltrans entered into a MOA with the SHPO in accordance with 36 CFR 800 (Section 106) on July 28, 2008.

LEAST HARM ANALYSIS AND CONCLUDING STATEMENT REGARDING THE MAXWELL DITCH SEGMENT

The least harm analysis is based on a comparison of each project alternative in relation to the following factors:

1. Ability to mitigate adverse impacts to each Section 4(f) resource;

2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features;

3. Relative significance of each Section 4(f) resource;

4. Views of the officials with jurisdiction over each Section 4(f) property;

5. Degree to which each alternative meets the purpose and need;

6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f); and

7. Substantial differences in costs among alternatives.

Alternative A (Build New Bridge and Seismic Retrofit Existing Bridge)

1. Ability to mitigate adverse impacts to each Section 4(f) resource: Mitigation would consist of installation of an informational kiosk in the vicinity of the bridge with interpretive information pertaining to the Maxwell Ditch segment.

2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features: Construction access and staging in the vicinity of the bridge abutments would remove an isolated segment of the Maxwell Ditch.

3. Relative significance of each Section 4(f) resource: The resource is a linear feature, which extends well beyond the physical limits of the bridge replacement project. The resource is presumed eligible for purposes of the bridge replacement project.

4. Views of the officials with jurisdiction over each Section 4(f) property: The SHPO concurs with the proposal to replace the existing structure and mitigation to resolve the adverse effects of the undertaking.

5. Degree to which each alternative meets the purpose and need: Alternative A satisfies the project purpose and need, but does not address the fact that the existing bridge is fracture critical. The bridge would require continued maintenance and additional retrofit work on steel members in the future.

6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f): The project will result in temporary effects upon the environment due to the removal of vegetation

and earth disturbance associated with construction access and staging. However, with this alternative, there are no adverse impacts to resources not protected by Section 4(f).

7. Substantial differences in costs among alternatives: The estimated cost to construct Alternative A is reported in the 2003 Project Scope Summary Report as $29.2 million versus $21.3 million for Alternative B and $10.5 million for Alternative C. In addition, with Alternative A, the existing (historic) bridge would remain in place, requiring ongoing maintenance costs for the painted finish and future rehabilitation efforts to address the continued deterioration (fatigue) of the structural steel.

Alternative B (Build New Bridge and Remove Existing Bridge)

1. Ability to mitigate adverse impacts to each Section 4(f) resource: Mitigation will consist of installation of an informational kiosk in the vicinity of the bridge with interpretive information pertaining to the Maxwell Ditch segment.

2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features: Construction access and staging in the vicinity of the bridge abutments would remove an isolated section of the Maxwell Ditch.

3. Relative significance of each Section 4(f) resource: The resource is a linear feature, which extends well beyond the physical limits of the bridge replacement project. The resource is presumed eligible for purposes of the bridge replacement project.

4. Views of the officials with jurisdiction over each Section 4(f) property: The SHPO concurs with the proposal to replace the existing structure and mitigation to resolve the adverse effects of the undertaking.

5. Degree to which each alternative meets the purpose and need: Alternative B best meets the project purpose and need because it provides a low maintenance structure that meets regional transportation needs.

6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f): The project will result in temporary effects upon the environment due to the removal of vegetation and earth disturbance associated with construction access and staging. However, with this alternative, there are no adverse impacts to resources not protected by Section 4(f).

7. Substantial differences in costs among alternatives: The estimated cost of Alternative B is reported in the 2003 Project Scope Summary Report as $21.3 million versus $29.2 million for Alternative A and $10.5 million for Alternative C. The existing bridge would be removed thereby eliminating the need for additional maintenance and a future project to address the deteriorating structural steel.

Alternative C Rehabilitate Existing Bridge

1. Ability to mitigate adverse impacts to each Section 4(f) resource: Mitigation would consist of installation of an informational kiosk in the vicinity of the bridge with interpretive information pertaining to the Maxwell Ditch segment.

2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features: Construction access and staging in the vicinity of the bridge abutments would remove an isolated section of the Maxwell Ditch.

3. Relative significance of each Section 4(f) resource: The resource is a linear feature, which extends well beyond the physical limits of the bridge replacement project. The resource is presumed eligible for purposes of the bridge replacement project.

4. Views of the officials with jurisdiction over each Section 4(f) property: SHPO concurs with the proposal to replace the existing structure and mitigation to resolve the adverse effects of the undertaking.

5. Degree to which each alternative meets the purpose and need: This alternative does not meet the project purpose and need because it does not replace the fatigued steel in its entirety. In addition, it does not address the lack of standard shoulders on the existing bridge.

6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f): The project will result in temporary adverse effects upon the environment due to the removal of vegetation and earth disturbance associated with construction access and staging. However, with this alternative, there are no adverse impacts to resources not protected by Section 4(f).

7. Substantial differences in costs among alternatives: The estimated cost of Alternative C is reported in the 2003 Project Scope Summary Report as $10.5 million versus $29.2 million for Alternative A and $21.3 million for Alternative B. Alternative C would prolong the structure's life for

approximately 25 years. At that point, another rehabilitation effort would be necessary to repair and replace other fatigued structural members.

Alternative D (No Build).

1. Ability to mitigate adverse impacts to each Section 4(f) resource: An immediate adverse effect or use of Section 4(f) resources would be avoided with the No Build Alternative.

2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features: There would be no harm to the Section 4(f) resource.

3. Relative significance of each Section 4(f) resource: The resource is a linear feature, which extends well beyond the physical limits of the bridge replacement project. The resource is presumed eligible for purposes of the bridge replacement project.

4. Views of the officials with jurisdiction over each Section 4(f) property: SHPO concurs with the proposal to replace the existing structure and mitigation to resolve the adverse effects of the undertaking.

5. Degree to which each alternative meets the purpose and need: Alternative D is the “No Build” alternative, which does not address the project purpose and need. Under this alternative, the existing bridge would be maintained and substantial improvements would not be made. The structural integrity of the bridge would continue to deteriorate and permit loads would continue to be limited due to the width and weight capacity of the bridge. Maintenance costs would increase, weight loads could be further restricted in the future, and eventually the bridge would need to be closed to traffic.

6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f): Restrictions would remain on vehicle loads due to weight and width limitations of the existing bridge. This could result in potential social and economic impacts due to restrictions on commercial and emergency response equipment, e.g., railroad and utility repair equipment, and fire suppression equipment.

7. Substantial differences in costs among alternatives: Alternative D would incur costs for maintenance of the steel paint finish and periodic inspections of the steel superstructure. In addition, this alternative would only delay the eventual rehabilitation or replacement of the bridge.

In summary, Alternative A meets the project purpose and need by providing a new modern bridge. However, even though the existing bridge would remain in place, the Maxwell Ditch segment would be adversely affected due to the construction, access and staging in the vicinity of the bridge abutments. In addition, Alternative A would still require additional maintenance of the existing Spanish Creek Bridge.

Alternative B will provide a modern, low maintenance bridge that will accommodate regional transportation needs. Removal of the existing bridge will eliminate costs associated with the maintenance or subsequent rehabilitation work on the historic structure.

Alternative C does not satisfy the project purpose and need because it would not replace the fatigued steel in its entirety. Successive rehabilitation efforts or future bridge replacement could be necessary. In addition, Alternative C would not address the lack of standard shoulders on the existing bridge.

Alternative D would avoid a use of to the Maxwell Ditch segment. However, this alternative does not meet the project purpose and need because it would not address the fact that the bridge's steel superstructure is fracture critical and the bridge is unable to accommodate oversize vehicle permit loads.

Based on the above considerations, there is no feasible and prudent alternative to the use of land from a segment of the Maxwell Ditch and the proposed action includes all possible planning to minimize harm to the Maxwell Ditch segment resulting from such use and causes the least overall harm in light of the statute's preservation purpose.

IMPACTS TO THE UTAH CONSTRUCTION ROAD SEGMENT

Alternative A (Build new bridge and seismic retrofit existing bridge)

Alternative A would require removal of a portion of the hillside at the southwest corner of the Spanish Creek Bridge for equipment positioning and access. This would remove some fifty feet from an isolated segment of the wagon road used for construction of the railroad by the Utah Construction Company. This isolated segment can be described as having a high degree of historical integrity in that it is clearly discernible as a road, albeit interrupted by prior highway construction and improved in some locations by modern power equipment. The Utah Construction Road segment will be assumed eligible for the National Register and will be treated as such for purposes of the proposed project. Impacts to the road segment would be to its integrity in the form of removal of that fifty foot length. Thus, a use of this isolated segment of the Utah Construction Road would result.

Alternative B (Build new bridge and remove existing bridge)

Alternative B will require removal of a portion of the hillside at the southwest corner of the Spanish Creek Bridge for equipment positioning and access. This will remove some fifty feet from an isolated segment of the wagon road used for construction of the railroad by the Utah Construction Company. This isolated segment can be described as having a high degree of historical integrity in that it is clearly discernible as a road, albeit interrupted by prior highway construction and improved in some locations by modern power equipment. The Utah Construction Road segment will be assumed eligible for the National Register and will be treated as such for purposes of the proposed project. Impacts to the road segment will be to its integrity in the form of removal of that fifty foot length. Thus, a use of this isolated segment of the Utah Construction Road will result.

Alternative C (Rehabilitate existing bridge)

Alternative C would require removal of a portion of the hillside at the southwest corner of the Spanish Creek Bridge for equipment positioning and access. This would remove some fifty feet from an isolated segment of the wagon road used for construction of the railroad by the Utah Construction Company. This isolated segment can be described as having a high degree of historical integrity in that it is clearly discernible as a road, albeit interrupted by prior highway construction and improved in some locations by modern power equipment. The Utah Construction Road segment will be assumed eligible for the National Register and will be treated as such for purposes of the proposed project. Impacts to the road segment would be to its integrity in the form of removal of that fifty foot length. Thus, a use of this isolated segment of the Utah Construction Road would result.

Alternative D (No build)

Alternative D would not impact the Utah Construction Road, nor would it comprise a use of the Utah Construction Road.

AVOIDANCE ALTERNATIVES FOR THE UTAH CONSTRUCTION ROAD SEGMENT

An avoidance alternative must be prudent and feasible to be considered for implementation. An alternative is feasible if it can be constructed based on accepted engineering principles. The following six-factor test was applied pursuant to 23 CFR 774.117 in determining whether an alternative would be prudent:

1. Compromises the project so that it is unreasonable given the purpose and need;

2. Results in unacceptable safety or operational problems;

3. After reasonable mitigation, still causes:

    - Severe social, economic, or environmental impacts;
    - Severe disruption to established communities;
    - Severe environmental justice impacts; or
    - Severe impacts to other federally protected resources.

4. Results in construction, maintenance, or operational costs of an extraordinary magnitude;

    - Consider factors such as: the percentage difference in the costs of the alternatives; how the cost difference relates to the total cost of similar transportation projects in the applicant's annual budget; and the extent to which the increased cost for the project would adversely impact the applicants' ability to fund other transportation projects.

5. Causes other unique problems or unusual factors; or

6. Involves multiple factors listed above that while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

Alternative A (Build New Bridge and Seismic Retrofit Existing Bridge)

Alternative A would require removal of a portion of the hillside at the southwest corner of the Spanish Creek Bridge for equipment positioning and access. This would remove some fifty feet from an isolated segment of the wagon road used for construction of the railroad by the Utah Construction Company, thereby affecting its integrity. Thus, a use of this isolated segment of the Utah Construction Road would result. This alternative would not avoid the use of the Utah Construction Road segment.

Alternative B (Build New Bridge and Remove Existing Bridge)

Alternative B will require removal of a portion of the hillside at the southwest corner of the Spanish Creek Bridge for equipment positioning and access. This will remove some fifty feet from an isolated segment of the wagon road used for construction of the railroad by the Utah Construction Company, thereby affecting its integrity. Thus,

a use of this isolated segment of the Utah Construction Road will result. This alternative would not avoid the use of the Utah Construction Road segment.

Alternative C (Rehabilitate Existing Bridge)

Alternative C would require removal of a portion of the hillside at the southwest corner of the Spanish Creek Bridge for equipment positioning and access. This would remove some fifty feet from an isolated segment of the wagon road used for construction of the railroad by the Utah Construction Company, thereby affecting its integrity. Thus, a use of this isolated segment of the Utah Construction Road would result. This alternative would not avoid the use of the Utah Construction Road segment.

Alternative D (No Build)

Alternative D would be feasible to implement, but would not be a prudent avoidance alternative because it falls within factor numbers 1 and 2. Implementation of Alternative D would not be a reasonable course of action because it would not address the purpose and need (Factor 1) and it would result in unacceptable safety and operational problems (Factor 2). This alternative would not address the condition of the Spanish Creek Bridge. Calculations show that the bridge is near the end of its fatigue service life as evidenced by fatigue cracks and distortion in the steel members. The bridge is currently classified as fracture critical. Also, it would not eliminate the width and weight limit issues. Restrictions on permit loads would continue; thus, transportation needs of the public, industry, and emergency response personnel would not be met. In addition, maintenance of the existing structure would require extra safety precautions due to the narrow width of the existing bridge deck.

MEASURES TO MINIMIZE HARM TO THE UTAH CONSTRUCTION ROAD SEGMENT

Alternative A (Build New Bridge and Seismic Retrofit Existing Bridge)

Caltrans has entered into an MOA with the SHPO to resolve adverse effects to historic properties resulting from the project. Under the terms of the MOA, a kiosk would be installed in the vicinity of the bridge with interpretive information pertaining to the Utah Construction Road segment.

Alternative B (Build New Bridge and Remove Existing Bridge)

Caltrans has entered into an MOA with the SHPO to resolve adverse effects to historic properties resulting from the project. Under the terms of the MOA, a kiosk

would be installed in the vicinity of the bridge with interpretive information pertaining to the Utah Construction Road segment.

Alternative C (Rehabilitate Existing Bridge)

Caltrans has entered into an MOA with the SHPO to resolve adverse effects to historic properties resulting from the project. Under the terms of the MOA, a kiosk would be installed in the vicinity of the bridge with interpretive information pertaining to the Utah Construction Road segment.

Alternative D (No Build)

With Alternative D the existing bridge would be maintained and substantial improvements would not be made. Therefore, no measures to minimize harm would be required as this Alternative avoids an immediate use of the Utah Construction Road segment.

COORDINATION RELATIVE TO THE UTAH CONSTRUCTION ROAD SEGMENT

SHPO consultation began with the submittal of an HPSR and supporting technical studies in December 2005. The SHPO concurred with the eligibility determinations by letters dated February 9, 2006 and May 3, 2006. The Utah Construction Road was assumed eligible for the National Register under criterion A in the area of transportation. A case was made for National Register eligibility of the Utah Construction Road through the entire canyon; however, it is beyond the scope of the proposed undertaking.

Caltrans elected to consider that the proposed project would have an adverse effect on the Utah Construction Road segment and therefore, considered the potential historic property in determining mitigation for the effects of the project.

Caltrans provided copies of the draft Section 4(f) Evaluation, appended to the draft Environmental Assessment, to the DOI during the public circulation period. One paper copy and 12 copies on compact disc were forwarded to the DOI on January 3, 2007 for review and comment pursuant to 23 CFR 771.135(i). Comments on the draft Section 4(f) Evaluation were requested by the close of the public review period, February 23, 2007. The DOI issued a letter on April 18, 2007 with the following recommendations: “Since SR-70 transits considerable area within Plumas National Forest, it may be desirable to contact their staff to determine if they may have any concerns.” And “To avoid or minimize affecting this contributing element [Spanish Creek Bridge] to the Historic District, consultation with the State Historic Preservation Office should be completed prior to selecting a final design or finalizing commitments for measures to minimize harm.” The letter also indicated that no responses or

comments had been received from any other Department of the Interior bureaus or offices.

In order to resolve the adverse effect on the Utah Construction Road Segment, Caltrans entered into a MOA with the SHPO in accordance with 36 CFR 800 (Section 106) on July 28, 2008.

LEAST HARM ANALYSIS AND CONCLUDING STATEMENT REGARDING THE UTAH CONSTRUCTION ROAD SEGMENT

The least harm analysis is based on a comparison of each project alternative in relation to the following factors:

1. Ability to mitigate adverse impacts to each Section 4(f) resource;
2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features;
3. Relative significance of each Section 4(f) resource;
4. Views of the officials with jurisdiction over each Section 4(f) property;
5. Degree to which each alternative meets the purpose and need;
6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f); and
7. Substantial differences in costs among alternatives.

<u>Alternative A (Build New Bridge and Seismic Retrofit Existing Bridge)</u>

1. Ability to mitigate adverse impacts to each Section 4(f) resource: Mitigation would consist of installation of an informational kiosk in the vicinity of the bridge with interpretive information pertaining to the Utah Construction Road segment.
2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features: Construction, access and staging in the vicinity of the bridge abutments would remove an isolated segment of the Utah Construction Road.
3. Relative significance of each Section 4(f) resource: The resource is a linear feature, which extends well beyond the physical limits of the bridge

replacement project. The resource is presumed eligible for purposes of the bridge replacement project.

4. Views of the officials with jurisdiction over each Section 4(f) property: The SHPO concurs with the proposal to replace the existing structure and mitigation to resolve the adverse effects of the undertaking.

5. Degree to which each alternative meets the purpose and need. Alternative A satisfies the project purpose and need, but does not address the fact that the existing bridge is fracture critical. The bridge would require continued maintenance and additional retrofit work on steel members in the future.

6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f): The project will result in temporary adverse effects upon the environment due to the removal of vegetation and earth disturbance associated with construction access and staging. However, with this alternative, there are no adverse impacts to resources not protected by Section 4(f).

7. Substantial differences in costs among alternatives: The estimated cost to construct Alternative A is reported in the 2003 Project Scope Summary Report as $29.2 million versus $21.3 million for Alternative B and $10.5 million for Alternative C. In addition, with Alternative A, the existing (historic) bridge would remain in place, requiring ongoing maintenance costs for the painted finish and future rehabilitation efforts to address the continued deterioration (fatigue) of the structural steel.

<u>Alternative B (Build New Bridge and Remove Existing Bridge)</u>

1. Ability to mitigate adverse impacts to each Section 4(f) resource: Mitigation will consist of installation of an informational kiosk in the vicinity of the bridge with interpretive information pertaining to the Utah Construction Road segment.

2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features: Construction, access and staging in the vicinity of the bridge abutments would remove an isolated segment of the Utah Construction Road.

3. Relative significance of each Section 4(f) resource: The resource is a linear feature, which extends well beyond the physical limits of the bridge replacement project. The resource is presumed eligible for purposes of the bridge replacement project.

4. Views of the officials with jurisdiction over each Section 4(f) property: The SHPO concurs with the proposal to replace the existing structure and mitigation to resolve the adverse effects of the undertaking.

5. Degree to which each alternative meets the purpose and need: Alternative B best meets the project purpose and need because it provides a low maintenance structure that meets regional transportation needs.

6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f): The project will result in temporary effects upon the environment due to the removal of vegetation and earth disturbance associated with construction access and staging. However, with this alternative, there are no adverse impacts to resources not protected by Section 4(f).

7. Substantial differences in costs among alternatives: The estimated cost of Alternative B is reported in the 2003 Project Scope Summary Report as $21.3 million versus $29.2 million for Alternative A and $10.5 million for Alternative C. The existing bridge would be removed thereby eliminating the need for additional maintenance and a future project to address the deteriorating structural steel.

Alternative C Rehabilitate Existing Bridge

1. Ability to mitigate adverse impacts to each Section 4(f) resource. Mitigation would consist of installation of an informational kiosk in the vicinity of the bridge with interpretive information pertaining to the Utah Construction Road segment.

2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features: Construction, access and staging in the vicinity of the bridge abutments would remove an isolated segment of the Utah Construction Road.

3. Relative significance of each Section 4(f) resource: The resource is a linear feature, which extends well beyond the physical limits of the bridge replacement project. The resource is presumed eligible for purposes of the bridge replacement project.

4. Views of the officials with jurisdiction over each Section 4(f) property: SHPO concurs with the proposal to replace the existing structure and mitigation to resolve the adverse effects of the undertaking.

5. Degree to which each alternative meets the purpose and need: This alternative does not meet the project purpose and need because it does not replace the fatigued steel in its entirety. In addition, it does not address the lack of standard shoulder width on the existing bridge.

6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f): The project will result in temporary effects upon the environment due to the removal of vegetation and earth disturbance associated with construction access and staging. However, with this alternative, there are no adverse impacts to resources not protected by Section 4(f).

7. Substantial differences in costs among alternatives: The estimated cost of Alternative C is reported in the 2003 Project Scope Summary Report as $10.5 million versus $29.2 million for Alternative A and $21.3 million for Alternative B. Alternative C would prolong the structure's life for approximately 25 years. At that point, another rehabilitation effort would be necessary to repair and replace other fatigued structural members.

Alternative D (No Build).

1. Ability to mitigate adverse impacts to each Section 4(f) resource: With Alternative D the existing bridge would be maintained and substantial improvements would not be made. Therefore, no measures to minimize harm would be required as this Alternative avoids an immediate use of the Utah Construction Road segment.

2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features: There would be no harm to the Section 4(f) resource.

3. Relative significance of each Section 4(f) resource: The resource is a linear feature, which extends well beyond the physical limits of the bridge replacement project.

4. Views of the officials with jurisdiction over each Section 4(f) property: SHPO concurs with the proposal to replace the existing structure and mitigation to resolve the adverse effects of the undertaking.

5. Degree to which each alternative meets the purpose and need: Alternative D is the "No Build" alternative, which does not address the project purpose and need. Under this alternative, the existing bridge would be maintained and substantial improvements would not be made. The structural integrity of the

bridge would continue to deteriorate and permit loads would continue to be limited due to the width and weight capacity of the bridge. Maintenance costs could increase, weight loads would be further restricted and eventually the bridge would need to be closed to traffic.

6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f): Restrictions would remain on vehicle loads due to weight and width limitations of the existing bridge. This could result in potential social and economic impacts due to restrictions on commercial and emergency response equipment, e.g., railroad and utility repair equipment, fire suppression equipment, etc, in the future.

7. Substantial differences in costs among alternatives: Alternative D would incur costs for maintenance of the steel paint finish and periodic inspections of the steel superstructure. In addition, this alternative would only delay the eventual rehabilitation or replacement of the bridge.

In summary, Alternative A meets the project purpose and need by providing a new modern bridge. However, even though the existing bridge would remain in place, the Utah Construction Road segment would be adversely affected due to the construction, access and staging in the vicinity of the bridge abutments. In addition, Alternative A would still require additional maintenance of the existing Spanish Creek Bridge.

Alternative B will provide a modern, low maintenance bridge that accommodates regional transportation needs. Removal of the existing bridge will eliminate costs associated with maintenance or subsequent rehabilitation work on the historic structure.

Alternative C does not satisfy the project purpose and need because it would not replace the fatigued steel in its entirety. Successive rehabilitation efforts or future bridge replacement could be necessary. In addition, Alternative C would not address the nonstandard shoulder width of the existing bridge.

Alternative D would avoid an adverse effect to the Utah Construction Road segment. However, this alternative does not meet the project purpose and need because it does not address the fact that the bridge's steel superstructure is fracture critical or the lack of standard width shoulders.

Based on the above considerations, there is no feasible and prudent alternative to the use of land from a segment of the Utah Construction Road and the proposed action includes all possible planning to minimize harm to the Utah Construction Road

segment resulting from such use and causes the least overall harm in light of the statute's preservation purpose.

OTHER PARK, RECREATIONAL FACILITIES, WILDLIFE REFUGES, AND HISTORIC PROPERTIES EVALUATED RELATIVE TO THE REQUIREMENTS OF SECTION 4(F)

This section of the document discusses parks, recreational facilities, wildlife refuges and historic properties found within or adjacent to the project area that do not trigger 4(f) protection either because: 1) they are not publicly owned, 2) they are not open to the public, 3) they are not eligible historic properties, 4) the project does not permanently use the property and does not hinder the preservation of the property, or 5) the proximity impacts do not result in constructive use.

LIST AND DESCRIPTION OF OTHER PROPERTIES EVALUATED RELATIVE TO THE REQUIREMENTS OF SECTION 4(f)

Spanish Creek Tunnel Overhead (Bridge # 09-0017): The Spanish Creek Tunnel Overhead was determined eligible for the National Register of Historic Places by consensus determination as a contributive element of the Feather River Highway Historic District on April 16, 1987. The Spanish Creek Tunnel Overhead (Figure 7) was included in the Area of Potential Effects (APE) for the proposed undertaking, but was subsequently determined to be outside of the limits of construction. The project will not result in a use of the Spanish Creek Tunnel Overhead and therefore, the provisions of Section 4(f) are not triggered.

Figure 7 - Spanish Creek Tunnel Overhead

USDA United States Department of Agriculture | Forest Service | Plumas National Forest
159 Lawrence Street
P. O. Box 11500
Quincy, CA 95971-6025
(530) 283-2050 Voice
(530) 534-7984 Text (TDD)

File Code: 2330/1580
Date: February 27, 2008

Edward Espinoza, Branch Chief
Office of Environmental Management MS-30
California Department of Transportation
P.O. Box 496073
Redding, CA 96049-6073

Dear Mr. Espinoza:

This letter is to confirm Plumas National Forest's (PNF's) determination, relative to Section 4(f) of the Department of Transportation Act [Section 4(f)] as it pertains to impacts to the recreation area, which includes the Spanish Creek Campground, resulting from the California Department of Transportation's (Caltrans) proposed Spanish Creek Bridge project.

Pursuant to Section 4(f), the PNF has determined that the recreation area, which includes the developed campground, is a significant designated public recreation property. That recreation area is depicted on the map, which is enclosed as an exhibit to this letter.

The PNF Land and Resource Management Plan (1988) recommended development of the campground, within the recreation area, to meet public demand (Forest Plan, Management Area 21, pg. 4-240). The demand for an additional developed campground was also heightened by the loss of two PNF public campgrounds adjacent to State Route 70 and the North Fork Feather River in 1986 due to flooding.

Following are the reasons why the attributes of the recreation area, which includes the developed campground area, make this area an important public recreation property relative to Section 4(f):

> "It is located out of the floodplain; it is close to Quincy (7 miles); there are no fully developed campgrounds in the area; it provides easy access to Bucks Lake and Lakes Basin Recreation Areas and the Bucks Lake Wilderness; other PNF developed campgrounds are at or near capacity; fishing access; centrally located in the County; generates recreation dollars to the local communities; provides a site for use by local organizations such as Boy Scouts, Girl Scouts, etc., access to a wildlife refuge; will replace lost campsites from the flooded campgrounds; close to power and water sources; availability of an area for an Incident Command Base, if needed; and un-crowded camping units." (*Spanish Creek Campground, Finding of No Significant Impact, February 23, 1987.*)

The recreation boundaries, which include the developed campground, encompass all developed amenities and proximate landscapes used by campers for activities and aesthetic values. The classification of this land by PNF as marginal timberland (Class III) with emphasis on visual

retention, developed recreation, and riparian management, substantiates that the primary value of the land is for camping and recreation.

The PNF and Caltrans have been engaged in ongoing project coordination relative to Section 4(f). Caltrans staff has verified that there are no prudent and feasible alternatives which avoid use of the recreation area, which includes the developed campground. The PNF and Caltrans have engaged in meetings during the planning phase of the proposed bridge replacement project to ensure that all possible measures are included in the project to minimize harm to the recreation area. These measures include:

- The campground will be closed during construction to protect the safety of the public.
- Within the limits of the paved campground access road, construction vehicles and equipment will be confined to the paved roadway unless otherwise directed by the project plans or Caltrans Resident Engineer.
- Construction storage and staging will occur only within those areas designated on the project plans.
- Mature trees near the campground entrance, as delineated on the project plans, will be preserved to the extent feasible.
- An informational sign will be installed at the campground entrance to inform the public about the project.
- Following construction, all disturbed areas within the recreation area will be stabilized with erosion control seeding. Pavement and infrastructure damaged as a result of Caltrans project will be repaired.

Impacts upon the recreation area which cannot be avoided or minimized include the following:

- The loss of campground revenue for a minimum of three years, during which time the campground will be closed. This includes the loss of day-use and camping opportunities, and rebuilding the patronage established since the campground opened in 2004. Direct administrative costs of agency coordination, public relations and concessionaire contract modification are also recognized.
- An adverse change in the setting of the recreation property due to the removal of mature trees and alteration of the landscape to accommodate construction access and staging. This will result in a loss of aesthetic values and recreation enjoyment by campground users.
- The loss of approximately 1.7 acres at the campground entrance due to a permanent shift in the highway alignment to connect to the new bridge.

The removal of significant trees and alteration of the landscape is an adverse and irretrievable impact to these recreation resources within the recreation area. To offset the loss of campground revenue and residual impacts to the recreation area resulting from Caltrans project, the PNF desires to construct future improvements within the recreation area that will enhance the camping and recreation experience. In light of the anticipated impacts, it is the position of PNF that mitigation in the form of monetary compensation would be appropriate for PNF to make those future recreation and camping improvements within the recreation areas defined on the attached map.

PNF, in consultation with Caltrans, has determined that the following compensation is proportionate to the magnitude of the project's impact on the Section 4(f) property and constitutes a reasonable public expenditure:

- Three-year closure of the campground and day use area plus direct administrative costs - $200,000
- Impacts to the recreation setting, including the developed campground, due to vegetation removal and landscape alteration - $500,000 ($100,000 per acre of trees affected within the campground boundary @ 5 acres)
- Value of lost property - $170,000

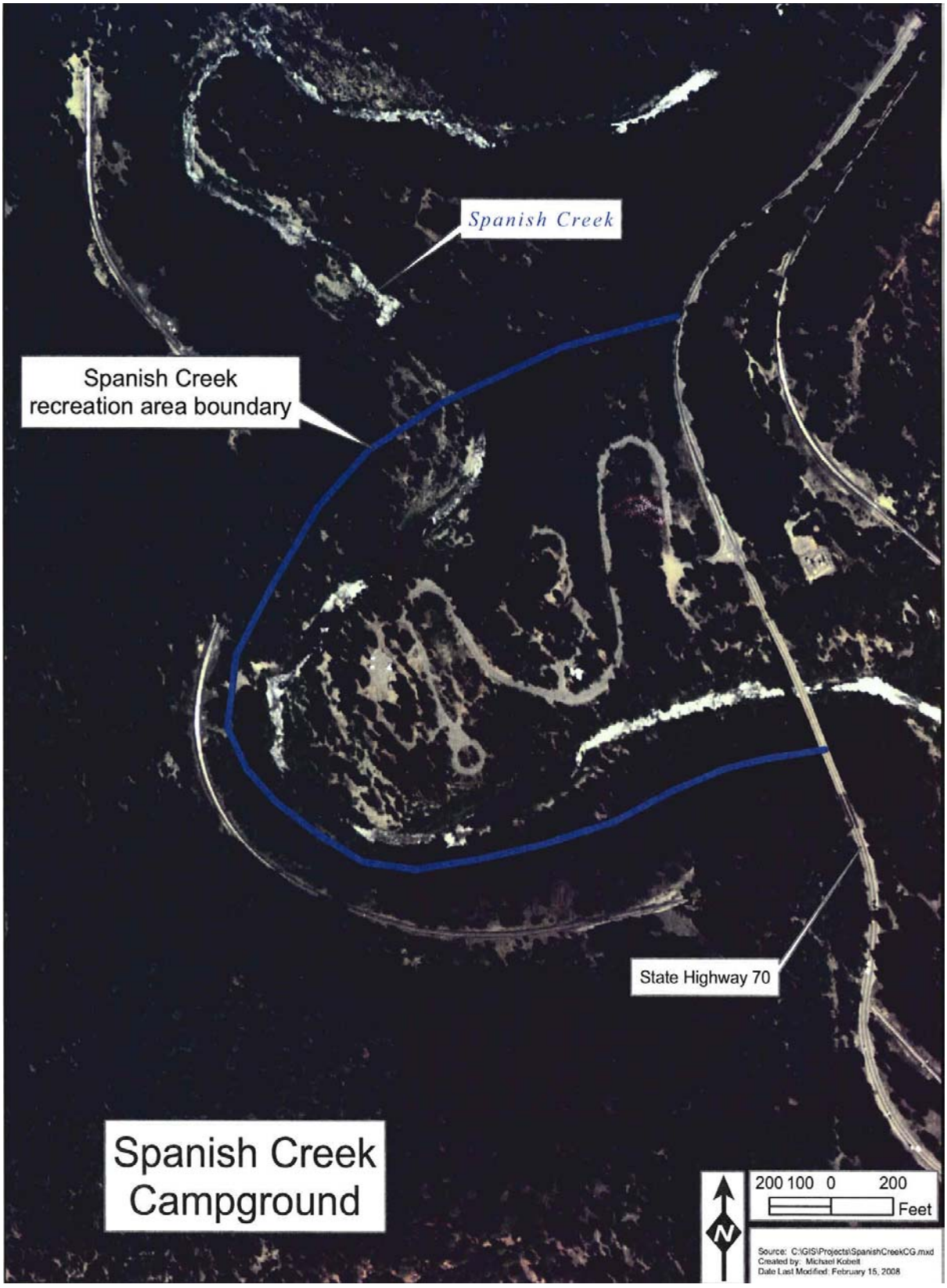
The PNF desires to enter into an agreement with Caltrans for the purpose of exchanging the total compensation amount of $870,000 at the time of project's construction contract, which is currently programmed for November 2009.

Sincerely,

ALICE B. CARLTON
Forest Supervisor

cc: Chris Quiney
Environmental Coordinator
Office of Environmental Management MS-30
California Department of Transportation
P.O. Box 496073
Redding, CA 96049-6073

Jill Nystrom
USA Lands Agent
Right of Way Office
4300 Caterpillar Road, MS-35
Redding, CA 96003


Spanish Creek
Spanish Creek recreation area boundary
State Highway 70
Spanish Creek Campground
200 100 0 200
Feet
N
Source: C:\GIS\Projects\SpanishCreekCG.mxd
Created by: Michael Kobelt
Date Last Modified: February 15, 2008

Appendix C Summary of Avoidance, Minimization, and/or Mitigation Measures

Environmental Factor	Potential Impact	Avoidance/Minimization Measure	Mitigation Measure
Cultural Resources	Adverse effect upon Spanish Creek Brg., Feather River Highway Historic District, assumed adverse effect upon Utah Construction Road and Maxwell Ditch	To the extent possible, minimize the shift in highway alignment	HAER recordation of bridge and construction of Interpretive kiosk describing historic resources affected by project
Land Use	Permanent and Temporary impacts to Spanish Creek Campground and recreation area	To the extent practicable, confine equipment and vehicles to paved areas and minimize vegetation removal; Restore impacted areas of campground and recreation area; stabilize disturbed soils; provide portage detour for boaters on Spanish Creek; Provide monetary compensation in the amount of $870,000 to PNF to improve recreation area, including campground.	
Utilities	Potential relocation of utility poles	Any required utility relocation would be performed prior to bridge construction	n/a
Visual/Aesthetics	Tree removal	Utilize campground access road	n/a

	within Spanish Creek Campground and recreation area	and limit tree removal to extent necessary to complete project; Install ESA fencing to delineate areas of preserved vegetation; replace trees and woody vegetation where appropriate.	
Water Quality & Storm water Runoff	Turbidity and solids due to construction impacts	Implement appropriate temporary and permanent storm water best management practices	n/a
Hazardous Waste	Expose or dislodge lead paint on existing bridge	Include standard specifications in plans for waste management and disposal	n/a
Air Quality	Airborne particulates from construction and demolition activities	Notify County Air Resources Board prior to any bridge rehabilitation or demolition work	n/a
Fish & Wildlife	Stream diversions and pile driving in creek	Maintain stream continuity, use clean materials, and replace riparian vegetation	n/a
Vegetation	Approximately 10.1 acres of vegetation removal	Limit vegetation removal to minimum necessary for construction; Install temporary ESA fencing to protect vegetation adjacent to construction areas; trim and cover riparian where practicable to allow regeneration following construction; Apply erosion control seeding and replace upland and riparian woody vegetation where appropriate	n/a

Appendix D Title VI Policy Statement

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
1120 N STREET
P. O. BOX 942873
SACRAMENTO, CA 94273-0001
PHONE (916) 654-5266
FAX (916) 654-6608
TTY (916) 653-4086

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January 14, 2005

TITLE VI
POLICY STATEMENT

The California Department of Transportation under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, and age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

WILL KEMPTON
Director

"Caltrans improves mobility across California"

Appendix E Scoping Comments

SPANISH CREEK BRIDGE PROJECT

PUBLIC COMMENT FORM

PLEASE USE THE FOLLOWING SECTION FOR YOUR COMMENTS, SUGGESTIONS AND CONCERNS

COMMENTS, SUGGESTIONS AND CONCERNS

I do not like Alternative A because spending dollars to retrofit a bridge for foot travel is prohibited.

I like Alt B or C depending on costs. The costs may be the same and so a new bridge (Alt B) would be best

THANK YOU

OPTIONAL INFORMATION (PLEASE PRINT CLEARLY)
Please include name and address if you would like to be kept on our mailing list.
Names and addresses are not confidential in the event there is a public records request for the infomnation.

Name Z. Organization CITIZEN

Address City QUINCY State CA Zip 95971

Caltrans Improves Mobility Across California

SPANISH CREEK BRIDGE PROJECT

PUBLIC COMMENT FORM

PLEASE USE THE FOLLOWING SECTION FOR YOUR **COMMENTS, SUGGESTIONS AND CONCERNS**

COMMENTS, SUGGESTIONS AND CONCERNS

(1) Make new bridge alignment far enough from old bridge so people can see the old bridge (alignment 4)

(2) Provide bypass bicycle and pedestrian access to the old bridge

(3) Go with a concrete arch type bridge or some other design that aesthetically pleasing

(4) Use railings that do not obscure ~~spoil~~ the view from bridge the new bridge

Please send photo simulations to email

THANK YOU

OPTIONAL INFORMATION (PLEASE PRINT CLEARLY)
Please include name and address if you would like to be kept on our mailing list.
Names and addresses are not confidential in the event there is a public records request for the information.

Name _____ Organization _____

Address _____ City Quincy State CA Zip 95971

Caltrans Improves Mobility Across California

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING ARNOLD SCHWARZENEGGER, *Governor*
DEPARTMENT OF TRANSPORTATION
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Redding, CA 96049-6073
TTY Telephone (530)225-2019
FAX (530)225-3019
TELEPHONE (530) 225-3174

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January 29, 2004

Quincy, CA 95971

Dear Mr.

Thank you for attending the public information meeting for the proposed Spanish Creek Bridge project and for taking the time to provide written comments. Per your request, enclosed are photo-simulations depicting different types of bridges that will be considered for project alternatives that include a new bridge. A photograph of the existing bridge is included for comparison.

If you have any questions or comments, please feel free to contact me at the address or telephone number referenced above.

Sincerely,

CHRIS QUINEY
Environmental Planner
North Region Office of Environmental Management - Redding

Attachments

"Caltrans improves mobility across California"

FEB 1 7 2004

Feather River Rail Society

P O Box 608 • Portola, CA 96122 • museum 530.832.4131 • office 530.832.1657 • fax 530.832.1854 • www.wplives.org

John Walker
Western Pacific Railroad
Historical Society
Portola Railroad Museum
Feather River Rail Society

February 12, 2004

Mr. Jonathon Oldham
Chief, Environmental Management Office
P.O. Box 496073
Redding, CA 96049-6073

Dear Mr. Oldham,

Unfortunately, I was unable to attend the January 27, 2004 public information meeting concerning the Spanish Creek Bridge on Highway 70 in Plumas County. I have some knowledge of the proposed replacement of the existing bridge and would like to respectfully offer some concerns and ideas I have in regards to the project.

One of the great assets of Plumas County is the beautiful drive up Highway 70 through the fabulous Feather River Canyon. As you are aware, the canyon is largely unchanged since the highway was built in the 1930s. Both the railroad and the highway offer the viewer a fascinating view of unique structural engineering and scenic delights.

Unfortunately, the narrow confines of the canyon do not allow for many places to pull off the road and rest or gain access to the river. In addition, there is a large following of railroad enthusiasts who like to take pictures of trains along this route. Again, there are few opportunities for these photographers, or scenic photographers, fisherman, birdwatchers, etc. to pull off the road and park. Just like the Spanish Creek Bridge, there are narrow shoulders and confined spaces that pose a severe threat to pedestrians, sightseers, bicyclist and photographers.

I have been told that a replacement bridge over Spanish Creek would likely be constructed south of the existing structure, would be higher and climb over the narrow ridges near the railroad "wye" bridge (known as "The Keddie Wye") and come back down to grade near the old gas station across from the entrance to the Keddie Resort.

Having traveled this route several hundred times over the years, I think this would be a wonderful idea. We would have a better bridge, a straighter route that would eliminate all of those sharp curves to the east of the existing bridge and eliminate the possibility of pedestrian accidents in the vicinity of the Keddie Wye in the area the local people call "Vicki's Corner".

I would also like to propose for your consideration, that the existing bridge and road be left in place and a rest area be established near the curve in the road where people overlook the Keddie Wye east of the existing bridge. I would suggest that this area be accessed via the old road coming west from the Keddie Resort and terminate at the rest area. I would then suggest that the rest of the old road be converted to a walking trail across the existing bridge and linking up with the U.S. Forest Service campground west of the existing bridge.

I do not have the expertise to analyze the soil composition of the area or the structural requirements of the new bridge and roadway. Thus, I have no idea of the engineering difficulties you may be facing. I just want to suggest that if it were possible to leave the old road and existing bridge in place for pedestrian access, this would become a popular rest and recreation spot. The scenic overlook near the Keddie Wye is a favorite location for rail photographers. Rail enthusiasts from all over the world visit this location annually. Our railroad museum draws some 10,000 visitors a year and many ask me for directions to the wye. Over the years there has been many close calls for photographers walking over to the north side of the road to overlook the wye. The area where these people used to park has been closed off with temporary concrete barriers now for several years in an attempt to stop pedestrians walking crossing the road on this blind curve.

By keeping the old road to this location, establishing a rest stop with restrooms, picnic tables, trash receptacles and informational signs, this location would become an interesting and safe, scenic overlook and recreation area for Plumas County travelers. Connecting this site via a walking trail across the existing bridge to the west would also enhance the existing campground.

I have been given permission by our FRRS President Mr. Rod McClure to offer the assistance of the Feather River Rail Society through the Portola Railroad Museum and the Western Pacific Railroad Historical Society in providing informational signs, possibly a historical marker (the Keddie Wye was the location of the driving of the final spike of the Western Pacific Railroad in 1909) and possibly other assistance in helping to create a safe area for rail photographers and an informational stop for other Plumas County travelers.

I thank you for your consideration of these suggestions. I think we have an opportunity to not only replace the existing bridge, but also enhance the Highway 70 route with a nice recreation area as well. I would like to be involved in any additional pre-planning, exploration of ideas and suggestions for this project. You can reach me at the address above or please feel free to contact me personally at 530-713-4935.

Sincerely,

John Walker
Museum Manager
Portola Railroad Museum

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING ARNOLD SCHWARZENEGGER, *Governor*
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TELEPHONE (530) 225-3308

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March 3, 2004

MR. JOHN WALKER
Feather River Rail Society
P.O. Box 608
Portola, CA 96122

03-Environmental Management
PLU-70-PM 35.0/35.6
03 172 02 373100
Spanish Creek Bridge Project

Dear Mr. Walker:

Thank you for your letter in response to our public notice regarding planning for the rehabilitation or replacement of the Spanish Creek Bridge (Brg. No. 9-15) on State Route 70 near Keddie. We welcome your participation during this early stage in the project development process. You have provided many important issues for consideration, including a concern for pedestrian safety and the benefits of providing a railroad viewing area at the Keddie Wye and a pedestrian connection to the Spanish Creek Campground.

Your letter indicates that you have been told that a replacement bridge over Spanish Creek would most likely be constructed south of the existing structure and that the highway would climb over the ridges near the Keddie Wye and meet the existing highway grade again near the entrance to the Keddie Resort. I have enclosed a display for your review depicting the project site and alternatives currently being evaluated. The purpose of the project is to provide a highway crossing at Spanish Creek that meets modern highway standards and accommodates regional transportation needs. Within the scope of the proposed project, there is currently not a need to extend the work much farther than the Spanish Creek Tunnel Overhead as indicated on the display. The need for the project is based upon the following deficiencies: The Spanish Creek Bridge exhibits signs of structural fatigue, does not meet modern seismic standards, does not have standard shoulder width, and cannot accommodate some large permit loads due to lane width and structural limitations for weight loading. Caltrans Office of Structure Design is currently analyzing the bridge to determine if it would be feasible to rehabilitate the bridge seismically and structurally, and modify the bridge to increase shoulder width and load capacity. This analysis is expected to be completed by September 2004. We anticipate distribution of a draft environmental document during the summer of 2005. The draft environmental document will present an alternatives analysis and the studies and coordination that were undertaken to arrive at the proposed solution. The input you have provided will be valuable to us during the alternatives analysis and when determining the scope of the project.

We appreciate the Feather River Rail Society's offer of assistance on this important project and we look forward to working with you. Please feel free to write or call me at (530) 225-3308, or the project Environmental Coordinator, Chris Quiney, at (530) 225-3174.

Sincerely,

JONATHAN OLDHAM, Chief
Office of Environmental Management
North Region - Redding

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California Regional Water Quality Control Board
Central Valley Region

Terry Tamminen
Secretary for Environmental Protection

Redding Office
415 Knollcrest Drive, Suite 100, Redding, California 96002
Phone (530) 224-4845 • FAX (530) 224-4857
http://www.swrcb.ca.gov/rwqcb5

Arnold Schwarzenegger
Governor

11 February 2004

California Department of Transportation
C/o Jonathan Oldham, Chief
P.O. Box 496073
Redding, CA 96040-6073

NOTICE OF PUBLIC INFORMATION MEETING, SPANISH CREEK BRIDGE REHAB/REPLACE, 02-PLU-70-PM-35.1/35.5, KEDDIE, PLUMAS COUNTY

We have reviewed the Notice of Public Information Meeting for the Spanish Creek Bridge Rehabilitation/Replacement Project located near the town of Keddie. The proposed project may include: removal of an eligible historic resource, effects upon an adjacent U.S. Forest Service campground, temporary traffic detours, temporary increases in noise and dust, acquisition of new highway right-of-way, temporary encroachment within the Spanish Creek floodplain, removal of vegetation and creation of temporary access roads for construction. We have the following comments regarding this project.

Caltrans Storm Water Permit

In order to protect water quality from the potential development activities, appropriate storm water pollutant controls will be required during construction. Construction activities for this project will be covered under the Caltrans Storm Water Permit (Order No. 99-00-DWQ), adopted in July 1999. The Caltrans Storm Water Permit covers all Caltrans construction activities. Caltrans is required to notify the Regional Board that a project is to be covered under the permit at least 30-days prior to the onset of construction. In addition, the Regional Board may require Caltrans to submit a Storm Water Pollution Prevention Plan to address potential water quality impacts.

Army Corps of Engineers and State Water Quality Certification

The proposed project will also require a 404 permit from the US Army Corps of Engineers and a 401 water quality certification from the State Water Resources Control Board. The Federal 404 permit is required for activities involving a discharge (such as fill or dredged material) to waters of the United States. "Waters" include wetlands, riparian zones, streambeds, rivers, lakes, and oceans. Typical activities include any modifications to these waters, such as stream crossings, stream bank modifications, filling of wetlands, etc. These projects also require a water quality certification (per Section 401 of the Clean Water Act) verifying that the project does not violate State water quality standards. The 404 permit and water quality certification must be obtained prior to disturbance. The Army Corps of Engineers contact for Plumas County is Matt Kelley (530) 223-9534. The water quality certification application can be obtained from the Regional Water Quality Control Board office in Redding.

If you have any questions regarding these comments, please contact me at (530) 224-4784.

Scott A. Zaitz

Scott A. Zaitz, R.E.H.S.
Environmental Scientist
South Regulatory Unit

SAZ:sae

cc: Mr. Matt Kelley, U.S. Army Corps of Engineers, Regulatory Unit, Redding
Department of Fish and Game, Region 2, Rancho Cordova
Plumas County Environmental Health, Quincy
Plumas County Public Works, Quincy

Appendix F Comments and Responses on Draft Environmental Document

BOARD OF SUPERVISORS

February 20, 2007

Ms. Cindy Anderson
Environmental Management
Office of Environmental Management—MS 30
P.O. Box ~~496973~~ 496073
Redding, CA 96049

RE: Spanish Creek Bridge Project on SR 70
Plumas County, 02-PLU-70-PM-35.1/35.5 373100
Draft Environmental Impact Report/Environmental Assessment
And Section 4(f) Evaluation

Dear Ms. Anderson:

This letter follows the Public Information Meeting that was conducted by your agency on January 25, 2007 in the Quincy Public Library in regard to the above captioned project.

The Board of Supervisors for Plumas County considers the bridge project to be of high importance and necessity. Accordingly, the Board opposes Alternative D (No Build).

Furthermore, the Board concurs that elimination of Alternative C (Rehabilitate Existing Bridge)
is appropriate for the reasons cited in the subject report/assessment.

The Board of Supervisors does not favor Alternative A (Build New Bridge and Seismic Retrofit Existing Bridge) and instead endorses Alternative B (Build New Bridge and Remove Existing Bridge) because Alternate B addresses and resolves many issues, such that the final constructed project will be in the best long-term interest of the County as well as the State and Federal Highway programs.

Sincerely,

Ole Olsen

Ole Olsen, Chairman

Cc: Bob Perreault, Director of Public Works
Marty Byrne, Plumas County Transportation Commission

520 MAIN ST., ROOM 309 • QUINCY, CALIFORNIA 95971 • (530) 283-6170 • FAX (530) 283-6288

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING ARNOLD SCHWARZENEGGER, *Governor*
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FAX (530)225-3019
TELEPHONE (530) 225-3308

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September 21, 2007

Mr. Ole Olsen, Chairman
Plumas County Board of Supervisors
520 Main Street, Room 309
Quincy, CA 95971

03-172-02-373100
PLU-70-PM 35.1/35.5
Spanish Creek Bridge Replacement
(Bridge No. 09-0015)

Dear Mr. Olsen:

Thank you for providing comments relative to the Draft Environmental Impact Report/Environmental Assessment for the proposed Spanish Creek Bridge replacement project on State Route 70, in Plumas County, near Keddie.

Your letter of February 20, 2007 indicates that the Plumas County Board of Supervisors endorses Alternative B (Build New Bridge and Remove Existing Bridge). Caltrans had anticipated project approval, which includes selection of a project alternative, in July 2007. However, due to the development of recent design and construction issues that warrant further evaluation, it will be necessary to postpone the project approval date until mid-2008. At this time, construction remains on schedule for 2009.

We appreciate your participation in the project development process. If you have additional comments or questions regarding this project, please contact the project's Environmental Coordinator, Chris Quiney at (530) 225-3174.

Sincerely,

Edward Espinoza, Chief
Environmental Management Office R1 – Redding

"Caltrans improves mobility across California"

To
chris_quiney@dot.ca.gov

Subject
Gold claim access

History:

This message has been forwarded.

Christopher,

I'm writing this as per your request from our conversation the other day. As I stated then, I own gold claims along Spanish Creek where the proposed bridge replacement is planned. In one of the plans it is proposed that the Spanish Creek campgrounds be closed. As I explained when we talked the only access that I have two to Creek because of the terrain is through the campgrounds. My request is that during the construction I be allowed to do enter the lower area of the campgrounds to access the river downstream from where the work will be performed. My plans currently are to only be in the area one to two weeks at a time possibly once or twice through the year. Any and all help you can give me in accomplishing this task will be greatly appreciated! If you have any questions or need more information please feel free to contact me.
Thanks again;
David Gerrer

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING ARNOLD SCHWARZENEGGER, *Governor*

DEPARTMENT OF TRANSPORTATION
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Redding, CA 96049-6073
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September 21, 2007

Mr. David Gerrer

03-172-02-373100
PLU-70-PM 35.1/35.5
Spanish Creek Bridge Replacement

Dear Mr. Gerrer:

This is to respond to your comments pertaining to the Draft Environmental Impact Report/Environmental Assessment (EIR/EA) for the proposed Spanish Creek Bridge replacement project on State Route 70 in Plumas County, California.

The Draft EIR/EA indicates that the campground road would be utilized for construction access, if the bridge were to be replaced, and consequently the campground would be closed to the public during that time due to safety reasons. Recreational activities on Spanish Creek, from the existing bridge location to the proposed temporary construction trestle site downstream, would also be closed to the public. The proposed trestle location is near the bottom campground loop. Construction of a new bridge would be expected to take approximately three years. Based on the information in the Draft EIR/EA, you have indicated a concern regarding your ability to access a mining claim on Spanish Creek in the vicinity of the U.S. Forest Service Spanish Creek Campground. Due to the steep terrain in this area, access is usually gained via use of the campground road.

In the event that the campground road is utilized for construction access, Caltrans would include contract provisions which would require the bridge contractor to accommodate specific access rights for situations such as yours. The project is currently scheduled to begin construction during the fall of 2009. As the project development process progresses, Caltrans' Right-of-Way Office will contact you to determine your access needs.

If you have any questions, please contact the project's environmental coordinator, Chris Quiney, at (530) 225-3174 or via e-mail at chris.quiney@dot.ca.gov.

Sincerely,

Edward Espinoza, Branch Chief
Office of Environmental Management (R1)

CC: Office of Right-of-Way

"Caltrans improves mobility across California"

United States Department of the Interior

NATIONAL PARK SERVICE
Pacific West Region
1111 Jackson Street, Suite 700
Oakland, California 94607-4807

IN REPLY REFER TO:
L7619 (PWRO-P)
4(f) ER-07\0014

APR 18 2007

Lanh T. Phan, P.E.
Project Development Engineer
FHWA California Division
650 Capitol Mall (Suite 4-100)
Sacramento, CA 95814

Dear Mr. Phan:

Provided below for your consideration are comments concerning the Draft Environmental Assessment and 4(f) Evaluation for the Spanish Creek Bridge Replacement on State Route 70, Plumas County, CA (ER-07\0014). No responses nor review comments were received from any other Department of the Interior bureaus or offices.

Our understanding is that this 4(f) evaluation noted potential historic resource effects from proposed work on Spanish Creek Bridge in the Feather River Highway Historic District. This bridge services SR-70 which is a conventional two-lane highway connecting U.S. Route 395 in southeastern Lassen County and SR-99 in Sutter County near Sacramento.

The proposed work project is located approximately 30 miles southeast of the nearest unit of the National Park System - Lassen Volcanic National Park. This national park would not be affected by the proposal, and we are unaware of any other parklands or refuges within the area of potential effect. However, since SR-70 transits considerable area within Plumas National Forest, it may be desirable to contact their staff to determine if they may have any concerns.

There will be no impacts to archeological sites. However, the 1930s bridge is a contributing element to the Feather River Historic District and there would be adverse impacts to it from either demolition or retrofitting. To avoid or minimize affecting this contributing element to the Historic District, consultation with State Historic Preservation Office should be completed prior to selecting a final design or finalizing commitments for measures to minimize harm.

For further information or clarification of these points as needed, please contact Mr. Mark Rudo, Archeologist, Pacific West Region, National Park Service at (510) 817-1405.

Jonathan B. Jarvis

Attachment

cc:
REO-Oakland
WASO-EQD

Received
APR 23 2007
FHWA

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STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING ARNOLD SCHWARZENEGGER, *Governor*

DEPARTMENT OF TRANSPORTATION
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Redding, CA 96049-6073
TTY Telephone (530)225-2019
FAX (530)225-3019
TELEPHONE (530) 225-3308

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May 10, 2007

Mr. Jonathan B. Jarvis
U.S. Department of the Interior
National Park Service – Pacific West Region
1111 Jackson Street, Suite 700
Oakland, CA 94607-4807

03-172-02-373100
PLU-70-PM 35.1/35.5
Spanish Creek Bridge Replacement

Dear Mr. Jarvis:

Thank you for providing comments relative to the Draft Environmental Impact Report/Environmental Assessment (EIR/EA) for the proposed Spanish Creek Bridge replacement project on State Route 70 in Plumas County, California.

The Federal Highway Administration and Caltrans have coordinated with Plumas National Forest and the State Office of Historic Preservation as recommended in your letter of April 18, 2007.

Should you have any questions or additional comments, please contact the project's environmental coordinator, Chris Quiney, at (530) 225-3174.

Sincerely,

Edward Espinoza, Chief
Office of Environmental Management (R1)

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California Regional Water Quality Control Board
Central Valley Region

Redding Branch Office
415 Knollcrest Drive, Suite 100, Redding, California 96002
(530) 224-4845 • Fax (530) 224-4857
http://www.waterboards.ca.gov/centralvalley

Linda Adams
Secretary for
Environmental Protection

Arnold Schwarzenegger
Governor

9 January 2007

Cindy Anderson, Environmental Branch Chief
California Department of Transportation
P.O. Box 496073
Redding, CA 96049-6073

COMMENTS ON ENVIRONMENTAL ASSESSMENT FOR SPANISH CREEK BRIDGE REPLACEMENT PROJECT, STATE ROUTE 70, PLUMAS COUNTY

On 29 December 2006, our office received a Draft Environmental Impact Report and Environmental Assessment from your office requesting comments regarding the project referenced above. The Central Valley Regional Water Quality Control Board (Regional Water Board) is a responsible agency for this project, as defined by the California Environmental Quality Act (CEQA).

The California Department of Transportation (Caltrans), in cooperation with the Federal Highway Administration (FHWA), proposes to replace Spanish Creek Bridge on State Route 70, post mile 35.3. The purpose of the project is to provide a road crossing that meets modern highway design standards and accommodates interregional transportation needs. The bridge was constructed in 1932 and is approaching the end of its service life. The preferred alternative includes constructing a new open spandrel concrete arch box girder bridge and removal of the existing bridge; this would minimize construction costs, unsightly cuts and fills, vegetation removal, and disturbed area subject to erosion.

The following comments are provided to help outline the potential permitting required by the Regional Water Board s agency, policy issues concerning the project, and suggestions for mitigation measures. Our present comments focus primarily on discharges regulated under our CWA §401 and storm water programs.

Required Water Board entitlements include:

• Fill or dredged material discharges	Clean Water Act (CWA) §401 water quality certification for federal waters; or Waste Discharge Requirements for non-federal waters
• Storm water and other wastewater discharges	CWA §402 NPDES permit

The following summarizes project permits that may be required by our agency depending upon potential impacts to water quality:

Water Quality Certification (401 Certification) – Permit issued for activities resulting in dredge or fill within waters of the United States (including wetlands). All projects must be evaluated for the presence of jurisdictional waters, including wetlands and other waters of the state. Destruction of, or impacts to these waters should be avoided. Under the Clean Water Act Section 401 and 404, disturbing these waters requires a Corp permit and a State 401 permit. The Section 404 and 401 permits are required for activities involving a discharge (such as fill or dredged material) to Waters of the United States. "Waters" include wetlands, riparian zones, streambeds, rivers, lakes, and oceans. Typical activities include any modifications to these waters, such as stream crossings, stream bank modifications, filling of wetlands, etc. If required, the Section 404 and 401 permits must be obtained prior to site disturbance.

General Permit for Storm Water Discharges Associated with Construction Activity (General Permit) – Land disturbances on proposed projects of 1 acre or more requires the landowner to obtain coverage under the General Permit. As the land disturbance for the Spanish Creek Bridge Replacement Project will be in excess of 1 acre, the owner of the property will need to file a Notice of Intent (NOI), along with a vicinity map, a Storm water Pollution Prevention Plan (SWPPP), and appropriate fees to the State Water Resources Control Board (SWRCB), prior to the commencement of activities on site. The owner may call our office to receive a permit package or download it off the Internet at http://www.waterboards.ca.gov/stormwtr/index.html.

If you have any questions or comments regarding this matter please contact me at (530) 224-4784 or by email at szaitz@waterboards.ca.gov.

Scott A. Zaitz

Scott A. Zaitz, R.E.H.S.
Environmental Scientist
Storm Water & Water Quality Certification Unit

SAZ: cg

cc: Mr. Matt Kelly, U.S. Army Corp of Engineers, Redding
Department of Fish and Game, Region 2, Rancho Cordova
Federal Highway Administration, Lakewood, CO

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
P.O. Box 496073
Redding, CA 96049-6073
TTY Telephone (530)225-2019
FAX (530)225-3019
TELEPHONE (530) 225-3308

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May 2, 2007

Mr. Scott Zaitz
California Regional Water Quality
Control Board
415 Knollcrest Drive, Suite 100
Redding, CA 96002

03-172-02-373100
PLU-70-PM 35.1/35.5
Spanish Creek Bridge Replacement

Dear Mr. Zaitz:

Thank you for providing comments relative to Caltrans' Draft Environmental Impact Report/Environmental Assessment for the proposed Spanish Creek Bridge replacement project on State Route 70, in Plumas County, near the community of Keddie. Your letter of January 9, 2007 provides a summary of regulatory permit requirements and pertinent water quality information.

Implementation of the project may require the placement of temporary fill, access, diversions, and/or dewatering within the banks of Spanish Creek. The appropriate notifications and fees will be submitted to your agency in accordance with governing water quality regulations. It is acknowledged that the California Department of Fish and Game and the U.S. Army Corps of Engineers also have jurisdiction in this matter.

Questions or comments regarding this project can be addressed to the project's Environmental Coordinator, Christopher Quiney, at (530) 225-3174.

Sincerely,

EDWARD ESPINOZA, Branch Chief
Environmental Management Office R1 - Redding

"Caltrans improves mobility across California"

01/12/2007 11:12 PM

To <chris.quiney@dot.ca.gov>
cc
bcc
Subject Comments concerning Draft EIR/EA for the Spanish Creek Bridge (02-PLU-70-PM 35.1/35.5 373100)

I only have two comments, both having to do with aesthetics.

1) While the Open Spandrel Concrete Arch Box Girder (the preferred design) is much better that the Concrete Box Girder and the Steel Plate Girder, my favorite is the Open Spandrel Concrete Arch Slab. I find the added vertical members between the arch and the decking more pleasing visually.
2) I believe that it would be a terrible decision to build the new bridge right next to the old bridge and leave the old bridge in place. Doing so would be a visual nightmare! Being located so close together, the two dissimilar bridges would clash visually when viewed from a distance as each bridge would obscure the aesthetics of the other (depending on which side they were being observed). In addition, the old bridge would appear as nothing more than two unused lanes next to traveled lanes when viewed while traveling on the new bridge. If it is not possible to separate the two bridges by a distance where each can be viewed 'as a whole' from the other or from other locations, then it is best that the old bridge be removed.

Gregory H. Henton

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING ARNOLD SCHWARZENEGGER, Governor
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March 11, 2008

Mr. Gregory H. Henton

Quincy, CA 95971

03-172-02-373100
PLU-70-PM 35.1/35.5
Spanish Creek Bridge Replacement
(Bridge No. 09-0015)

Dear Mr. Henton:

Thank you for providing comments on the Draft Environmental Impact Report/Environmental Assessment (EIR/EA) for the proposed Spanish Creek Bridge replacement project on State Route 70 in Plumas County near Keddie. Upon consideration of all comments, Caltrans will select a preferred alternative and make the final determination of the project's effect on the environment. We expect to make this decision in July 2008.

You provided the following comments:

1. "While the open spandrel concrete arch box girder (the preferred design) is much better than the concrete box girder and the steel plate girder, my favorite is the open spandrel concrete arch slab. I find the added vertical members between the arch and the decking more pleasing visually."

2. "I believe that it would be a terrible decision to build the new bridge right next to the old bridge and leave the old bridge in place. Doing so would be a visual nightmare! Being located so close together, the two dissimilar bridges would clash visually when viewed from a distance as each bridge would obscure the aesthetics of the other (depending on which side they were being observed). In addition, the old bridge would appear as nothing more than two unused lanes next to traveled lanes when viewed while traveling on the new bridge. If it is not possible to separate the two bridges by a distance where each can be viewed "as a whole" from the other or from other locations. Then it is best that the old bridge be removed."

In response to item number 1, Caltrans evaluated four bridge types based on foundation requirements, cost, and aesthetics. Preliminary estimates revealed that the concrete arch bridges were less expensive than the others and were more pleasing aesthetically. It was decided that based on its lower overall cost, the arch box girder bridge would be utilized if alternative A or B were selected.

In response to item 2, if Alternative A were selected, a new bridge would be located immediately west of the existing bridge, which would remain in place. Because this alternative would not address the structural condition of the existing bridge and would entail a substantial long-term maintenance commitment, Caltrans desires to remove the existing bridge (Alternative B). Regardless of whether Alternative A or B were selected, Caltrans would propose preparation of a Historic American Engineering Record (HAER) to document the bridge and construction of an interpretive kiosk within the entrance of the Spanish Creek Campground near the northern bridge abutment. The kiosk would include information about the Spanish Creek Bridge, Feather River Highway Historic District, Maxwell

Ditch segment, Utah Construction Road segment, and the Western Pacific Railroad.

Following approval of the Final EIR/EA, Caltrans will move forward with project implementation. Construction is scheduled to begin late in 2009 and will take approximately three years to complete.

We appreciate the time you have taken to provide input during the project development process. If you have any questions or comments about this project, please contact the project's Environmental Coordinator, Chris Quiney, at (530) 225-3174 or via e-mail at chris.quiney@dot.ca.gov.

Sincerely,

Edward Espinoza, Chief
Environmental Management Office – Redding R1

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Arnold Schwarzenegger
Governor

STATE OF CALIFORNIA FEB 2 8 2007
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit

Cynthia Bryant
Director

February 14, 2007

Christopher Quiney
Department of Transportation, District 2
1667 Riverside Drive
Redding, CA 96001

Subject: Spanish Creek Bridge Replacement Project
SCH#: 2004092030

Dear Christopher Quiney:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on February 13, 2007, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Terry Roberts

Terry Roberts
Director, State Clearinghouse

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH# 2004092030
Project Title Spanish Creek Bridge Replacement Project
Lead Agency Caltrans #2

Type EIR Draft EIR
Description The preferred alternative entails removal of the existing bridge and construction of a new bridge on a different alignment.

Lead Agency Contact
Name Christopher Quiney
Agency Department of Transportation, District 2
Phone (530) 225-3174 **Fax**
email
Address 1667 Riverside Drive
City Redding **State** CA **Zip** 96001

Project Location
County Plumas
City
Region
Cross Streets US Forest Service Spanish Creek Campground entrance
Parcel No.
Township 25N **Range** 9E **Section** 15 **Base** Greenvil

Proximity to:
Highways 70
Airports
Railways
Waterways Spanish Creek
Schools
Land Use State Highway and National Forest

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Cumulative Effects; Forest Land/Fire Hazard; Landuse; Noise; Recreation/Parks; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Vegetation; Water Quality; Wildlife

Reviewing Agencies Resources Agency; Regional Water Quality Control Bd., Region 5 (Redding); Department of Parks and Recreation; Native American Heritage Commission; Office of Historic Preservation; Department of Fish and Game, Region 2; Department of Water Resources; California Highway Patrol; Air Resources Board, Transportation Projects; Department of Toxic Substances Control

Date Received 12/28/2006 **Start of Review** 12/28/2006 **End of Review** 02/13/2007

Note: Blanks in data fields result from insufficient information provided by lead agency.

Sierra Pacific Industries
P.O. Box 750 • Quincy, California 95971 • (530) 283-2820

February 9, 2007

Cindy Anderson
Office of Environmental Management
P. O. Box 496073
Redding, California 96049-6073

Dear Cindy:

We support the proposed project bringing the Spanish Creek Bridge up to present day seismic standards and to accommodate larger permitted loads. Our company has a vested interest in the project with regards to possible delays to traffic going east and west on State Route 70 caused by the construction activities.

In your appendix A California Environmental Quality Act Evaluation under Community Resources you have stated less than significant impact associated with construction activities. Last year we had approximately 24000 log loads cross the bridge between April and November. Potential delays caused by construction might mean one less round trip for our log haulers on a daily basis. The resulting loss of loads will be significant to our mill. We have a narrow window of opportunity to move the logs needed to keep our mill running at full capacity. The planning process for the construction activities must facilitate the free flow of traffic during this period of time.

Thank you again for the allowing us to comment on the proposed project. If you have any questions or concerns about my comments, please call me at 530 283-6714.

Sincerely,

Tom Downing

Tom Downing
Timber Manager

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING ARNOLD SCHWARZENEGGER, Governor
DEPARTMENT OF TRANSPORTATION
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Redding, CA 96049-6073
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TELEPHONE (530) 225-3308

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December 17, 2007

Mr. Tom Downing
Timber Manager
Sierra Pacific Industries
P.O. Box 750
Quincy, CA 95971

03-172-02-373100
PLU-70-PM 35.1/35.5
Spanish Creek Bridge Replacement
(Bridge No. 09-0015)

Dear Mr. Downing:

Thank you for providing comments on the Draft Environmental Impact Report/Environmental Assessment (EIR/EA) for the proposed Spanish Creek Bridge replacement project on State Route 70 in Plumas County, California.

Your letter of February 9, 2007 indicates support for a project that would upgrade and improve the Spanish Creek Bridge. However, Sierra Pacific Industries is concerned that traffic delays during construction could significantly affect mill operations.

We had anticipated project approval, which includes selection of a project alternative, in July 2007. Due to the development of design and construction issues that warrant further evaluation, it will be necessary to postpone the project approval date until mid-2008. At this time, construction remains on schedule for 2009.

With regard to traffic delays during construction, if a new bridge were constructed, traffic would continue to utilize the existing bridge until the new bridge is operational. Construction staging would allow two lanes of traffic throughout much of the construction process. However, intermittent one-way traffic control would be required during normal construction operations such as staging setup and changes, concrete pours, material and equipment delivery, etc. During one-way traffic control, motorists would experience delays of less than ten minutes. Preparation of a traffic handling plan would consider peak traffic flows and maximum traffic delay criteria.

Blasting and high cut removal would result in longer delays. Blasting would be required to make a highway cut in rock at the south end of the project. Traffic delays of 20-40 minutes could be expected. Due to the type of rock, proximity of the existing highway to the rock, and safety concerns, these blasting delays would be unavoidable. Blasting would be scheduled for a specific time of day, taking into account railroad operations and peak traffic flows. The blasting schedule could be provided to you upon request so you could plan accordingly for these delays. Throughout construction, the public would be informed of traffic issues through press releases.

We understand the importance of minimizing traffic delays during construction and the specific concerns your company has relative to mill operations. We would be glad to meet with you to discuss possible measures that could be implemented during construction to avoid or minimize delays for log haulers.

We appreciate your interest in this project and the time you have taken to provide input. If you have additional questions or comments, please contact the project's environmental coordinator, Chris Quiney at (530) 225-3174.

Sincerely,

Edward Espinoza, Chief
Office of Environmental Management (R1)

Appendix G Correspondence and Agreements with SHPO and ACHP Regarding Historic Properties

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DISTRICT DIRECTOR
1657 RIVERSIDE DRIVE
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REDDING, CA 96049-6073
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TTY (530) 225-2019

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02-Environmental Planning
02-Plu-70
KP 56.5/57.1(PM 35.1/35.5)
EA 03 172 02 373100

December 28, 2005

Mr. M. Wayne Donaldson
State Historic Preservation Officer
Office of Historic Preservation
P.O. Box 942896
Sacramento, CA 94296-0001

Re: Historic Property Survey Report for the Spanish Creek Bridge Project, Plumas County, California

Dear Mr. Donaldson:

The California Department of Transportation (Caltrans), under the authority of the Federal Highway Administration (FHWA), is initiating consultation with the State Historic Preservation Officer (SHPO) regarding the Spanish Creek Bridge Project. This consultation is undertaken in accordance with the July 2003 *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation* (PA).

Enclosed you will find a Historic Property Survey Report (HPSR) for the proposed undertaking. The HPSR is intended to fulfill three of Caltrans' responsibilities under Section 106 of the National Historic Preservation Act: determination of the Area of Potential Effects (APE); identification of potential historic properties located within the undertaking's APE; and evaluation of potential historic properties for eligibility to the National Register of Historic Places (NRHP). Under the PA, Caltrans is responsible for ensuring the appropriateness of the APE (Stipulation VIII. A) and the adequacy of historic properties identification efforts (Stipulation VIII. B). We are consulting with you at the present time under Stipulation VIII. C.5 of the PA, which requires that we seek your concurrence on Caltrans' determinations of eligibility for potential historic properties.

On behalf of FHWA, Caltrans proposes to replace or rehabilitate the Spanish Creek Bridge on State Route 70 in Plumas County. The project will entail either building a new bridge immediately (15 m) west of the existing bridge and rehabilitating the existing bridge for pedestrian use, building a new bridge and removing the existing bridge, rehabilitating the existing bridge, or performing maintenance only on the existing bridge. If a new bridge is constructed, traffic would continue to use the existing bridge while construction of the new bridge takes place. The new bridge would be an open spandrel

arch box concrete structure. Due to extremely steep slopes in the highway right of way, access to the bridge for construction would take place via an existing paved road, over Spanish Creek on a temporary bridge, and up the south side of the creek on a temporary road. A short section of highway to the north and south of the bridge would be realigned westerly to conform with the new bridge. This realignment would result in 6000 cubic meters (7848 cubic yards) of excess material. A previously approved disposal site would be made available to the contractor for disposal. An extensive re-grading and revegetation effort would follow construction to restore the aesthetics of the area. Most construction activity would take place within an area of approximately 305 m (1000 ft) by 46 m (150 ft) centered on the existing bridge. Additional areas would be needed mainly for access. A full project description and depiction of the APE can be found in Attachment A of the HPSR.

Consultation and identification efforts for the Spanish Creek Bridge Project (summarized in pages 2-8 of the attached HPSR) resulted in the identification of ten (10) resources requiring formal evaluation within the APE, including:

- 8 built environment resources
- 2 historical archaeological resources

All other resources identified within the APE (e.g., can scatters) were exempted from formal evaluation pursuant to Stipulation VIII.C.1 and Attachment 4 of the PA (Properties Exempt from Evaluation). These exempted resources included can scatters and isolated mining pits.

Of the ten (10) resources identified within the APE, three (3) have previously been determined eligible to the NRHP via the consensus process. These are the Spanish Creek Bridge (09 0015), the Feather River Highway Historic District (CA-PLU-970-H), and the Spanish Creek Tunnel Overhead (09 0017).

Caltrans' formal evaluation efforts for the remaining seven (7) resources resulted in the following determinations pursuant to Stipulation VIII.C:

- 1 built environment resource (Dark Canyon Road) is determined eligible for the NRHP under criterion A, as an addition to a resource previously determined eligible;
- 1 built environment resource (Utah Construction Road) is determined eligible for the NRHP under criterion A for the purposes of this project only;
- 2 historical archaeological sites (CA-PLU-893H and CA-PLU-2914H) are determined not eligible;
- 2 built environment resources (Indian Valley Road [Quincy-Westwood Road] and Union Pacific Railroad Tunnel and associated trackage) are determined not eligible; and
- 1 built environment resource (CA-PLU-2794H), not fully evaluated, but the portion within the APE is not eligible by itself and non-contributing to any potential eligibility of the larger resource.

Pursuant to Stipulation VIII.C.5 of the PA, Caltrans is requesting your concurrence with the following eligibility determinations:

(1) the following built environment resource is eligible to the NRHP under criterion A for values associated with engineering and transportation, as an addition to the Feather River Highway Historic District: Dark Canyon Road;
(2) the following built environment resource is eligible to the NRHP, for the purposes of this project only, under criterion A for values associated with engineering and transportation: Utah Construction Road;
(3) the following built environment resources are not eligible to the NRHP: UPRR Tunnel No. 31 and the Indian Valley Road [Quincy-Westwood Road];
(4) the portion within the APE of the following built environment resource is not eligible to the NRHP and is non-contributing to any potential eligibility of the larger resource: Maxwell Ditch; and
(5) the following historical archaeological resources are not eligible to the NRHP: CA-PLU-2914H and CA-PLU-893H.

We look forward to receiving your response within 30 days of your receipt of this submittal, in accordance with StipulationVIII.C.5a of the PA. If you need any additional information, please do not hesitate to contact Caltrans Archaeologist Beth Bennett at (530) 225-3012; e-mail Elizabeth_Bennett@dot.ca.gov or Caltrans Historian George Petershagen at (530) 225-2085; e-mail George_Petershagen@dot.ca.gov. Finally, thank you for your assistance with this undertaking.

Sincerely,

CINDY ANDERSON, Chief
Environmental Management Branch R1
North Region- Redding

Enclosure: Spanish Creek Bridge HPSR

cc: Gene Fong, FHWA Division Administrator

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STATE OF CALIFORNIA – THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, *Governor*

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-6624 Fax: (916) 653-9824
calshpo@ohp.parks.ca.gov
www.ohp.parks.ca.gov

February 9, 2006 Reply To: FHWA060104A

Cindy Anderson, Chief
Environmental Management Branch R1
North Region – Redding
Department of Transportation
PO Box 496073
Redding, CA 96049-6073

Re: Determinations of Eligibility for the Proposed Spanish Creek Bridge Project, Plumas County, CA

Dear Ms. Anderson:

Thank you for consulting with me about the subject undertaking in accordance with the *Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA).

Caltrans is requesting my concurrence, pursuant to Stipulation VIII.C.5 of the PA, in its determination that the following properties are not eligible for the National Register of Historic Places (NRHP):

- CA-PLU-893H
- CA-PLU-2914H
- Indian Valley Road [Quincy-Westwood Road]
- Union Pacific Railroad Tunnel No. 31

I concur.

Caltrans has also determined that Butte County Road 50545A, the Dark Canyon Road, from Jarbo Gap to the Dark Canyon Boat Launch Ramp is eligible for the NRHP as a contributing element to the Feather River Highway Historic District, a district previously determined eligible for the NRHP. When the initial determination of eligibility was done for the Feather River Highway Historic District, Caltrans chose to limit the district to only those portions of the highway still in commission. Unfortunately, in doing so, Caltrans eliminated some five miles of the former Feather River Lateral that arguably still hold the same degree of integrity as the in-service highway portion. Several brief segments of original pavement are encountered as one travels the Dark Canyon Road, bypassed for curve corrections just as in the case of the in-service highway alignment. Many

examples of masonry of brilliant hues reflecting conditions of the local area exist along the roadway as do relics of a 1930s highway not found in quantity along the in-service highway alignment. Overall Caltrans has concluded that the Dark Canyon Road adds to the sense of 1930s highway over and above that of the in-service alignment and therefore merits inclusion within the Feather River Highway District as a contributive segment of the district. **I concur.**

In addition, Caltrans is assuming for the purposes of this project that the Utah Construction Road of the Western Pacific Railroad is eligible for the NRHP under criterion A in the area of transportation. The period of significance is 1906/1907. Caltrans has determined that a strong case could be made for the NRHP eligibility of the Utah Construction Road through the entire canyon, however it is beyond the scope of this proposed undertaking to document this. **I concur.**

I am presently unable to concur that the segment of the Maxwell Ditch (CA-PLU-2794H) in the undertaking's APE is ineligible for inclusion in the NRHP. While the subject segment, approximately 300 ft. in length, appears to be largely unremarkable and lack individual distinction, I am unclear about whether the segment may nonetheless potentially contribute to the historic significance and the integrity of the property as a whole. The Maxwell Ditch, a construction of the Maxwell Ditch and Mine Company of San Francisco, appears to have been in operation from 1872 to 1884, and may be a relatively rare, relatively intact example of a type of enterprise that was fundamental to the development of Plumas County. I have a concern that the FHWA and I may inadvertently contribute to the degradation of the broader property's integrity by concluding a consensus determination for the subject segment. I would prefer to suspend consideration of the subject segment's NRHP eligibility until such time as a more complete context for its relevance to the Maxwell Ditch, as a whole, becomes available. For the purpose of our present consultation, I recommend, in the absence of the availability of such a context, that the FHWA assume the National Register eligibility of the subject segment.

Thank you for considering historic properties as part of your project planning. If you have any questions, please contact Natalie Lindquist of my staff at your earliest convenience at (916) 654-0631 or e-mail at nlindquist@parks.ca.gov .

Sincerely,

Stephen D. Mikesell for

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

STATE OF CALIFORNIA – THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, Governor

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-6624 Fax: (916) 653-9824
calshpo@ohp.parks.ca.gov
www.ohp.parks.ca.gov

3 May 2006

In Reply Refer To
FHWA060104A

Cindy Anderson, Chief
Environmental Management Branch R1
North Region—Redding
California Department of Transportation
P.O. Box 496073
Redding, California 96049-6073

RE: 02-ENVIRONMENTAL PLANNING, 02-PLU-70, KP 56.5/57.1 (PM 35.1/35.5), EA 03 172 02 373 100 [SECTION 106 CONSULTATION (RND.02) ON THE REPLACEMENT OR REHABILITATION OF THE SPANISH CREEK BRIDGE ON STATE ROUTE 70, PLUMAS COUNTY, CALIFORNIA]

Dear Ms. Anderson,

The purpose of this letter is to clarify one aspect of our consultation on the subject undertaking. I continue our consultation here under the 1 January 2004 *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as It Pertains to the Administration of the Federal-aid Highway Program in California* (PA).

I recommended in my letter of 9 February 2006 that the California Department of Transportation (Caltrans) assume the National Register of Historic Places eligibility of the segment of the Maxwell Ditch (CA-PLU-2794H) in the undertaking's APE [W End Pt.—(NAD 83) 4432478/673729, E End Pt.—(NAD 83) 4432503/673820]. I understand, on the basis of a 27 March 2006 telephone conversation between George Petershagen of your staff and Mike McGuirt of my staff, that Caltrans wishes to accept and act upon the foregoing recommendation.

I provide the present letter and the signature block below as a means to conclude our consultation under stipulation VIII.C.5 of the PA. If, in fact, Caltrans wishes to accept and act upon my 9 February 2006 recommendation on the Maxwell Ditch segment, please sign the signature block below and return a signed copy of it to me at your earliest convenience.

Please direct any questions or concerns that you may have to Project Review Unit archaeologist Mike McGuirt at 916.653.8920 or at mmcgu@parks.ca.gov.

Sincerely,

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

Date May 12, 2006

Cindy Anderson, Chief
Environmental Management Branch R1
North Region, California Department of Transportation

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
CALIFORNIA DIVISION
650 Capitol Mall, Suite 4-100
Sacramento, CA. 95814
October 30, 2006

IN REPLY REFER TO
HDA-CA
File # 02-PLU-70
PM 35.1/35.5
EA 02-373100
Spanish Creek Bridge
Replacement Project
OHP file # FHWA060104A
Document # P55793

CERTIFIED RETURN RECEIPT REQUESTED:7003 1680 0002 3832 3394

Mr. Milford Wayne Donaldson, FAIA
State Historic Preservation Officer
Office of Historic Preservation
P.O. Box 942896
Sacramento, CA 94296-0001

Dear Mr. Donaldson:

The Federal Highway Administration (FHWA) and the California Department of Transportation (Caltrans), District 2, are proposing to replace the Spanish Creek Bridge (Bridge No. 09-0015) on State Route (SR) 70 in Plumas County, near the community of Keddie, California.

Previous consultation for this project included the submittal of a Historic Property Survey Report (HPSR) and supporting technical studies in December 2005. The State Historic Preservation Officer (SHPO) concurred with the eligibility determinations by letter, dated February 9, 2006, and May 3, 2006.

Enclosed, for your review and comment, is a Finding of Adverse Effects (FOAE), in print and electronic format, as part of our continuing Section 106 consultation for the project.

Pursuant to 36 CFR Part 800.5, FHWA/Caltrans has applied the criteria of adverse effect and finds that the proposed project will have an adverse effect on the following historic properties:

- Feather River Highway Historic District
- Spanish Creek Bridge as a contributive element of the Feather River Highway Historic District
- Spanish Creek Bridge as a California Historic Truss Bridge.

FHWA/Caltrans has also produced a Draft Memorandum of Agreement (MOA) included as Attachment (5) in the FOAE. FHWA is requesting the SHPO review and comment on this Draft MOA pursuant to 36 CFR 800.6(a), 800.6(b)(1) and Stipulation XI.A. of the *Programmatic*

Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California (Section 106 PA).

In Summary, FHWA is requesting the SHPO:

1. To concur with the FOAE pursuant to 36 CFR 800.5, and
2. To review and comment on the enclosed Draft MOA pursuant to 36 CFR 800.6 and the Section 106 PA's Stipulation XI.A.

If you have any questions, please contact Lanh Phan, at (916) 498-5046, or Gary Sweeten, (916) 498-5128.

Sincerely,

/s/ Lanh T. Phan

For
Gene K. Fong
Division Administrator

Enclosure

cc: e-mail (w/out enclosure)
Jay Norvell, Caltrans
Gina Moran, Caltrans
Lena Ashley, Caltrans
Katrina Pierce, Caltrans
Cindy Anderson, Caltrans
George Petershagen, Caltrans
Jill Hupp, Caltrans
Leland Dong, FHWA
Lisa Cathcart-Randall, FHWA
Gary Sweeten, FHWA
Lanh Phan, FHWA

Lphan/LG

STATE OF CALIFORNIA – THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, *Governor*

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-6624 Fax: (916) 653-9824
calshpo@ohp.parks.ca.gov
www.ohp.parks.ca.gov

May 7, 2007 Reply To: FHWA060104A

Gene K. Fong, Division Administrator
Federal Highway Administration
California Division
650 Capitol Mall, Suite 4-100
Sacramento, CA 95814

Re: Findings of Effect for the Proposed Replacement of the Spanish Creek Bridge (Bridge No. 09-0015) on State Route 70 in Plumas County, CA

Dear Mr. Fong:

Thank you for consulting with me about the subject undertaking in accordance with the *Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA).

The Federal Highway Administration (FHWA) is requesting my concurrence that the proposed project will have an adverse effect on the following historic properties:

- Feather River Highway Historic District
- Spanish Creek Bridge

Based on my review of the submitted documentation I concur. My comments on the proposed Memorandum of Agreement will follow at a later date.

Thank you for considering historic properties as part of your project planning. If you have any questions, please contact Natalie Lindquist of my staff at your earliest convenience at (916) 654-0631 or e-mail at nlindquist@parks.ca.gov .

Sincerely,

Susan K Stratton for

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

STATE OF CALIFORNIA--BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
DIVISION OF ENVIRONMENTAL ANALYSIS, MS 27
1120 N STREET
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Flex your power!
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April 25, 2008

Ms. Carol Legard
FHWA Liaison
Office of Federal Agency Programs
Advisory Council on Historic Preservation
1100 Pennsylvania Avenue NW, Suite 803
Washington, DC 20004

02-PLU-70, P.M. 35.1/35/5
Spanish Creek Bridge Replacement
EA 02-373100
FHWA060104A

Dear Ms. Legard:

Subject: Notification of Finding of Adverse Effect for the for the Spanish Creek Bridge Replacement Project on State Route 70 near Keddie, CA, (02-PLU-70, P.M. 35.1/35.5), EA 02-373100

In accordance with Section 800.6(a)(1) of the Advisory Council on Historic Preservation's (ACHP) regulations, "Protection of Historic Properties" (36 CFR Part 800), the California Department of Transportation (Caltrans) is notifying you of our adverse effect finding for the above referenced undertaking. It has come to our attention that the ACHP may not have been previously notified of the adverse effect. Please accept my apologies for this oversight.

Caltrans is transmitting this as a federal agency, following the provisions of the *Memorandum of Understanding (MOU) between the Federal Highway Administration and the California Department of Transportation Concerning the State of California's Participation in the Surface Transportation Project Delivery Pilot Program*, which became effective on July 1, 2007. The MOU was signed pursuant to Section 6005 of the 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) which allows the Secretary of Transportation to assign, and the State of California to assume, responsibility for FHWA's responsibilities under NEPA as well as consultation and coordination responsibilities under other Federal environmental laws. In that this project is covered by the above referenced MOU, FHWA has assigned, and Caltrans has assumed, FHWA responsibility for environmental review, consultation, and coordination on this project. Please direct all future correspondence on this project to Caltrans.

In conjunction with FHWA, Caltrans proposes to replace the existing Spanish Creek Bridge on State Route 70 near Keddie, California. Two properties previously evaluated as eligible for the National Register of Historic Places (National Register) were identified within the project's area of potential effect: CA-PLU-970/H (Feather River Highway Historic District) and Spanish Creek Bridge (Bridge No. 09-0015). The Feather River Highway Historic District was determined eligible for the National Register under Criterion A by consensus in 1989. Spanish Creek Bridge was determined eligible for the National Register under Criterion A during Caltrans' Statewide Historic Bridge Survey conducted

in 1986. Spanish Creek Bridge is also a contributor to the Feather River Highway Historic District.

In applying the Criteria of Adverse Effect pursuant to Stipulation X of the January 2004 *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation*, Caltrans found that the proposed bridge replacement project would have an adverse effect on the historic properties. On May 7, 2007 the SHPO concurred with Caltrans' finding of adverse effect for the undertaking. Enclosed is the Finding of Effect report supporting this conclusion, together with the related correspondence.

Caltrans proposes to resolve the adverse effect by entering into a Memorandum of Agreement (MOA) with the SHPO. Proposed mitigation includes recordation of the bridge to the standards of the Historic American Engineering Record (HAER) and construction of an interpretive display at the entrance to the nearby Spanish Creek Campground of the Plumas National Forest. The interpretive display would address the many historic and potential historic properties in the area including the bridge, highway, railroad facilities, mining facilities, and older, now abandoned, roads and highways. Caltrans has submitted a copy of the draft MOA to the SHPO for review and comment, and encloses a copy herewith. Caltrans has also consulted with the staff of the Plumas National Forest regarding the undertaking and its effects on historic properties.

If you need any additional information, please contact Jill Hupp, Chief of the Caltrans Cultural and Community Studies Office Section 106/PA Coordination Branch, at (916) 654-3567 or jill_hupp@dot.ca.gov. Thank you for your assistance.

Sincerely.

GREGORY P. KING
Chief
Cultural and Community Studies Office
Division of Environmental Analysis

Enclosures:

- *Finding of Adverse Effect for the Spanish Creek Bridge Replacement Project, State Route 70, Plumas County (February 2006)*
- Draft MOA
- Letter from Caltrans District 2 dated August 25, 2006
- Letter from FHWA dated October 30, 2006
- Letter from SHPO dated May 7, 2007

cc: Jill Hupp – HQ; Chris Quiney – District 2; George Petershagen – District 2; Blossom Hamusek – District 4 HRC

Preserving America's Heritage

June 25, 2008

Mr. Gregory P. King, Chief
Cultural and Community Studies Office
Division of Environmental Analysis, MS 27
Department of Transportation
1120 N Street
P.O. Box 942874
Sacramento, CA 94274-0001

Ref: *Proposed Spanish Creek Bridge Replacement Project*
Plumas County, California

Dear Mr. King:

On May 1, 2008 the Advisory Council on Historic Preservation (ACHP) received your notification regarding the adverse effects of the referenced undertaking. Based upon the information you provided, we have concluded that Appendix A, *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*, of our regulations, "Protection of Historic Properties" (36 CFR Part 800), does not apply to this undertaking. Accordingly, we do not believe that our participation in the consultation to resolve adverse effects is needed. However, if we receive a request for participation from the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer, affected Indian tribe, a consulting party, or other party, we may reconsider this decision. Additionally, should circumstances change, and you determine that our participation is needed to conclude the consultation process, please notify us.

Pursuant to 36 CFR §800.6(b)(1)(iv), you will need to file the final Memorandum of Agreement (MOA), developed in consultation with the California SHPO, Indian tribes, and other consulting parties, and related documentation at the conclusion of the consultation process. The filing of the MOA with the ACHP and fulfillment of its stipulations are required to complete your compliance responsibilities under Section 106 of the National Historic Preservation Act.

Thank you for providing us with your notification of adverse effect. If you have any questions or require further assistance, please contact Carol Legard at 202-606-8522 or clegard@achp.gov.

Sincerely,

LaShavio Johnson

LaShavio Johnson
Historic Preservation Technician
Federal Permitting, Licensing and Assistance Section
Office of Federal Agency Programs

ADVISORY COUNCIL ON HISTORIC PRESERVATION

1100 Pennsylvania Avenue NW, Suite 803 • Washington, DC 20004
Phone:202-606-8503 • Fax: 202-606-8647 • achp@achp.gov • www.achp.gov

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

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DIVISION OF ENVIRONMENTAL ANALYSIS, MS 27
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Flex your power!
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December 9, 2008

Ms. Carol Legard
FHWA Liaison, Office of Federal Agency Programs
Advisory Council on Historic Preservation
1100 Pennsylvania Avenue NW, Suite 803
Washington, DC 20004

02-PLU-70
P.M. 35.1/35/5
Spanish Creek Bridge Replacement
EA 02-373100

Dear Ms. Legard:

Subject: Submittal of signed MOA for the Spanish Creek Bridge Replacement Project on State Route 70 near Keddie, CA, (02-PLU-70, P.M. 35.1/35.5), EA 02-373100

The California Department of Transportation (Caltrans) and the California State Historic Preservation Officer executed a Memorandum of Agreement (MOA) on July 28, 2008 for the above referenced project. In accordance with 36 CFR 800.6(b)(1)(iv), Caltrans is submitting a signed copy of the MOA for the Advisory Council on Historic Preservation's files.

Caltrans is transmitting this as a federal agency, following the provisions of the *Memorandum of Understanding (MOU) between the Federal Highway Administration and the California Department of Transportation Concerning the State of California's Participation in the Surface Transportation Project Delivery Pilot Program,* which became effective on July 1, 2007. The MOU was signed pursuant to Section 6005 of the 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, which allows the Secretary of Transportation to assign, and the State of California to assume, responsibility for FHWA's responsibilities under NEPA as well as consultation and coordination responsibilities under other Federal environmental laws. In that this project is covered by the above referenced MOU, FHWA has assigned, and Caltrans has assumed, FHWA responsibility for environmental review, consultation, and coordination on this project. Please direct all future correspondence on this project to Caltrans.

If you need any additional information, please contact Jill Hupp at (916) 654-3567. Thank you.

Sincerely,

GREGORY P. KING
Chief
Cultural and Community Studies Office
Division of Environmental Analysis

C. Legard
December 9, 2008
2

Enclosure

c: JHupp – CCSO; Jill Hupp – HQ; Chris Quiney – District 2; George Petershagen – District 2; Blossom Hamusek – District 2 HRC

MEMORANDUM OF AGREEMENT
BETWEEN THE CALIFORNIA DEPARTMENT OF TRANSPORTATION AND
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING REPLACEMENT OF THE SPANISH CREEK BRIDGE IN PLUMAS COUNTY, CALIFORNIA

WHEREAS, the Federal Highway Administration (FHWA) has assigned and the California Department of Transportation (Caltrans) has assumed FHWA responsibility for environmental review, consultation, and coordination under the provisions of the *Memorandum of Understanding between the Federal Highway Administration and the California Department of Transportation Concerning the State of California's Participation in the Surface Transportation Project Delivery Pilot Program*, which became effective on July 1, 2007 and applies to this project; and

WHEREAS, Caltrans has determined that replacement of the Spanish Creek Bridge (Bridge No. 09 0015) on State Route 70 in Plumas County (Caltrans Expenditure Authorization 02-373100) (Undertaking) will have an adverse effect on the Spanish Creek Bridge and the Feather River Highway Historic District, properties determined to be eligible for inclusion in the National Register of Historic Places (National Register), and therefore historic properties as defined at 36 CFR § 800.16(l)(1), and segments of the Maxwell Ditch and the Utah Construction Road, which Caltrans will consider to be eligible for the purpose of this Undertaking (historic properties); and

WHEREAS, Caltrans has consulted with the California State Historic Preservation Officer (SHPO) pursuant to stipulations X.C and X.I. of the January 2004 *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA), and, where the PA so directs, in accordance with 36 CFR Part 800, the regulations implementing Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470f), as amended (NHPA), regarding the Undertaking's effects on the historic properties, and has notified the Advisory Council on Historic Preservation (ACHP) of the adverse effect finding pursuant to 36 CFR § 800.6(a)(1); and

WHEREAS, Caltrans has thoroughly considered alternatives to the Undertaking, has determined that the statutory and regulatory constraints on the design of the Undertaking preclude the possibility of avoiding adverse effects to historic properties during the Undertaking's implementation, and has further determined that it will resolve the adverse effect of the Undertaking on the subject historic properties through the execution and implementation of this Memorandum of Agreement (MOA); and

WHEREAS, Caltrans District 2 (District 2) and the Plumas National Forest (Forest) have participated in the consultation and have been invited to concur in this MOA; and

NOW, THEREFORE, Caltrans and the SHPO agree that, upon Caltrans' decision to proceed with the Undertaking, Caltrans shall ensure that the Undertaking is implemented in accordance with the following stipulations in order to take into account the effect of the Undertaking on historic properties, and that these stipulations shall govern the Undertaking and all of its parts until this MOA expires or is terminated.

STIPULATIONS

Caltrans shall ensure that the following stipulations are implemented:

I. AREA OF POTENTIAL EFFECTS

A. The Undertaking's Area of Potential Effects (APE) dated December 19, 2007 is depicted as Exhibit 1 of Attachment A of this MOA. The APE includes the maximum existing or proposed right of way for all alternatives under consideration, easements (temporary and permanent), all improved properties subject to temporary or permanent changes in access (ingress and egress), and areas where visual or audible changes could occur outside the required right of way.

B. If modifications to the Undertaking, subsequent to the execution of this MOA, necessitate the revision of the APE, Caltrans will consult with District 2 and the SHPO to facilitate mutual agreement on the subject revisions. If Caltrans, District 2 and the SHPO cannot reach such agreement, then the parties of this MOA shall resolve the dispute in accordance with stipulation IV.B below. If Caltrans, District 2, and the SHPO reach mutual agreement on the proposed revisions, then Caltrans will submit a final map of the revisions, consistent with the requirements of stipulation VIII.A and XVI.A of the PA, no later than 30 days following such agreement.

II. TREATMENT OF HISTORIC PROPERTIES

A. Photography and Construction Drawings

1. Prior to the start of any work that could adversely affect characteristics that qualify the Spanish Creek Bridge as a historic property, Caltrans shall ensure that large format (4" by 5" or larger negative size) photographs are taken showing the Spanish Creek Bridge in context as well as details of its historic engineering features. Photographs shall be processed for archival permanence in accordance with the Historic American Engineering Record (HAER) photographic specifications. Views of the Spanish Creek Bridge shall include:

    a. Contextual views showing the Spanish Creek Bridge in its setting;

    b. Elevation views;

    c. Views of the Spanish Creek Bridge piers and abutments;

    d. Detail views of significant engineering and design elements.

2. Caltrans shall produce plans, elevations, and selected details from the original construction drawings for the Spanish Creek Bridge, in 8 ½" by 11" format, for inclusion in the report cited in Subsection B of this stipulation.

B. Written Documentation Following the NPS HAER *Guidelines for Preparing Written Historical and Descriptive Data*, September 1993.

A written historical and descriptive report for the Spanish Creek Bridge will be completed. This report will provide a physical description of the Spanish Creek Bridge, discuss its construction and its significance under applicable National Register criteria, and address the historical context for its

construction following the format and instructions in the above-referenced HAER guidelines for written documentation.

C. Distribution of Documentation

Upon completion, copies of the documentation prescribed in this Stipulation shall be retained by District 2 and deposited in the Caltrans Transportation Library and History Center in Caltrans Headquarters in Sacramento. Copies will be provided to the California Office of Historic Preservation and offered to the Plumas County Historical Society and Plumas National Forest.

D. Interpretive Display

1. Caltrans shall design and construct an interpretive display in an area selected in consultation with the Forest near the entry to the Spanish Creek Campground.

   a. **Interpretive Information.** Interpretive placards mounted on posts within a suitable framework and protected from the effects of the weather shall be included to depict the history of the Feather River Highway Historic District and the Spanish Creek Bridge as they reflect the transportation history of the Feather River Canyon. Other similarly mounted placards shall depict the history of other historic properties within and near the APE, including the Maxwell Ditch, the former Western Pacific Railroad, and the Utah Construction Road and other abandoned roadways. The placard text and graphics will distill information gathered from reputable sources, e.g. libraries and archive facilities.

   b. **Design.** Caltrans shall design the placards in consultation with Plumas National Forest and shall design the interpretive facilities in accordance with National Park guidelines.

   c. **Installation.** Caltrans shall install the interpretive facilities following the removal of the now existing Spanish Creek Bridge.

   d. **Duration.** The interpretive facilities will remain in place permanently.

   e. **Operation and Maintenance.** Maintenance of the interpretive facility shall be governed by a Memorandum of Understanding between Caltrans and Plumas National Forest that will allow operational control to reside with Plumas National Forest and maintenance responsibility to be shared between Caltrans and Plumas National Forest.

III. DISCOVERIES AND UNANTICIPATED EFFECTS

If Caltrans determines after construction of the Undertaking has commenced, that the Undertaking will affect a previously unidentified property that may be eligible for the National Register, or affect a known historic property in an unanticipated manner, Caltrans shall address the discovery or unanticipated effect in accordance with 36 CFR § 800.13(c). Caltrans at its discretion may, hereunder and pursuant to 36 CFR § 800.13(c), assume any discovered property to be eligible for inclusion in the National Register.

IV. ADMINISTRATIVE PROVISIONS

A. Standards

1. **Professional Qualifications.** All activities prescribed by stipulations I and II of this MOA shall be carried out under the authority of Caltrans by or under the direct supervision of a person or persons meeting at a minimum the Secretary of Interior's *Professional Qualifications Standards* (48 FR 44738-39) (PQS) in the appropriate disciplines. However, nothing in this stipulation may be interpreted to preclude Caltrans or any agent or contractor thereof from using the properly supervised services of persons who do not meet the PQS.

2. **Documentation Standards.** Written documentation of activities prescribed by stipulations I and II of this MOA shall conform to the Secretary of Interior's Guidelines for Archaeology and Historic Preservation (48 FR 44716-44740) as well as to applicable standards and guidelines established by the SHPO.

B. Resolving Objections

1. Should any party to this MOA object at any time in writing to the manner in which the terms of this MOA are implemented, to any action carried out or proposed with respect to implementation of the MOA (other than the Undertaking itself), or to any documentation prepared in accordance with and subject to the terms of this MOA, Caltrans shall immediately notify the other MOA parties of the objection, request their comments on the objection within 15 days following Caltrans' notification, and proceed to consult with the objecting party for no more than 30 days to resolve the objection. Caltrans will honor the request of the other parties to participate in the consultation and will take any comments provided by those parties into account.

2. If the objection is resolved during the 30-day consultation period, Caltrans may proceed with the disputed action in accordance with the terms of such resolution.

3. If at the end of the 30 days consultation period, Caltrans determines that the objection cannot be resolved through such consultation, then Caltrans shall forward all documentation to the ACHP, including Caltrans' proposed response to the objection, with the expectation that the ACHP will, within thirty (30) days after receipt of such documentation:

   a. Advise Caltrans that the ACHP concurs in Caltrans' proposed response to the objection, whereupon Caltrans will respond to the objection accordingly. The objection shall thereby be resolved; or

   b. Provide Caltrans with recommendations, which Caltrans will take into account in reaching a final decision regarding its response to the objection. The objection shall thereby be resolved; or

   c. Notify Caltrans that the objection will be referred for comment pursuant to 36 CFR § 800.7, and proceed to refer the objection and comment. Caltrans shall take the resulting comments into account in accordance with 36 CFR § 800.7(c)(4) and Section 110(l) of the NHPA. The objection shall thereby be resolved.

4. Should the ACHP not exercise one of the above options within 30 days after receipt of all pertinent documentation, Caltrans may assume the ACHP's concurrence in its proposed response to the objection and proceed to implement that response. The objection shall thereby be resolved.

5. Caltrans shall take into account any of the ACHP's recommendations or comments provided in accordance with this stipulation with reference only to the subject of the objection. Caltrans' responsibility to carry out all actions under this MOA that are not the subject of the objection shall remain unchanged.

6. At any time during implementation of the measures stipulated in this MOA, should a member of the public raise an objection in writing pertaining to such implementation to any signatory party to this MOA, that signatory party shall immediately notify Caltrans. Caltrans shall immediately notify the other signatory parties in writing of the objection. Any signatory party may choose to comment in writing to Caltrans. Caltrans shall establish a reasonable time frame for this comment period. Caltrans shall consider the objection, and in reaching its decision, Caltrans will take all comments form the other signatory parties into account. Within 15 days following closure of the comment period, Caltrans will render a decision regarding the objection and respond to the objecting party. Caltrans will promptly notify the other signatories of its decision in writing, including a copy of the response to the objecting party. Caltrans' decision regarding the resolution will be final. Following issuance of its final decision, Caltrans may authorize the action subject to dispute hereunder to proceed in accordance with the terms of that decision.

7. Caltrans shall provide all parties to this MOA, the ACHP if the ACHP has commented, and any parties that have objected pursuant to section B.6.of this stipulation, with a copy of its final written decision regarding any objection addressed pursuant to this stipulation.

8. Caltrans may authorize any action subject to objection under this stipulation to proceed after the objection has been resolved in accordance with the terms of this stipulation.

C. Amendments

Any MOA party may propose that this MOA be amended, whereupon all signatory parties shall consult for no more than 30 days to consider such amendment. The amendment will be effective on the date a copy signed by all of the original signatories is filed with the ACHP. If the signatories cannot agree to appropriate terms to amend the PA, any signatory may terminate the agreement in accordance with Stipulation IV.D., below

D. Termination

1. If this MOA is not amended as provided for in section C of this stipulation, or if either signatory proposes termination of this MOA for other reasons, the signatory party proposing termination shall, in writing, notify the other MOA parties, explain the reasons for proposing termination, and consult with the other MOA parties for at least 30 days to seek alternatives to termination. Such consultation shall not be required if Caltrans proposes termination because the Undertaking no longer meets the definition set forth in 36 CFR § 800.16(y).

2. Should such consultation result in an agreement on an alternative to termination, then the signatory parties shall proceed in accordance with the terms of that agreement.

3. Should such consultation fail, the signatory party proposing termination may terminate this MOA by promptly notifying the other MOA parties. Termination hereunder shall render this MOA without further force or effect.

4. If this MOA is terminated hereunder, and if Caltrans determines that the Undertaking will nonetheless proceed, then Caltrans shall comply with the requirements of 36 CFR § 800.3-800.6.

E. Duration of MOA

1. Unless terminated pursuant to section D. of this stipulation, or unless it is superseded by an amended MOA, this MOA will be in effect following execution by the signatory parties until Caltrans, in consultation with the other signatory parties, determines that all of its stipulations have been satisfactorily fulfilled.

2. The terms of this MOA shall be satisfactorily fulfilled within ten (10) years following the date of execution by the signatory parties. If Caltrans determines that this requirement cannot be met, the MOA parties will consult to reconsider its terms. Reconsideration may include continuation of the MOA as originally executed, amendment of the MOA, or termination. In the event of termination, Caltrans will comply with section D.4.of this stipulation, if it determines that the Undertaking will proceed notwithstanding termination of this MOA.

3. If the Undertaking has not been implemented within 10 years following execution of this MOA, this MOA shall automatically terminate and have no further force or effect. In such event, Caltrans shall notify the other MOA parties in writing and, if it chooses to continue with the Undertaking, shall reinitiate review of the Undertaking in accordance with 36 CFR Part 800.

F. Effective Date

This MOA will take effect on the date that it has been executed by Caltrans and the SHPO.

EXECUTION of this MOA by Caltrans and the SHPO, its filing with the ACHP in accordance with 36 CFR § 800.6(b)(1)(iv), and subsequent implementation of its terms, shall evidence, pursuant to 36 CFR § 800.6(c), that this MOA is an agreement with the ACHP for purposes of Section 110(l) of the NHPA, and shall further evidence that Caltrans has afforded the ACHP an opportunity to comment on the Undertaking and its effect on historic properties, and that Caltrans has taken into account the effect of the Undertaking on historic properties.

SIGNATORY PARTIES:

California Department of Transportation

By _____ Date 7/28/08
Jay Norvell, Chief
Division of Environment Analysis

California State Historic Preservation Officer

By _____ Date 7/28/08
Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

CONCURRING SIGNATORY:

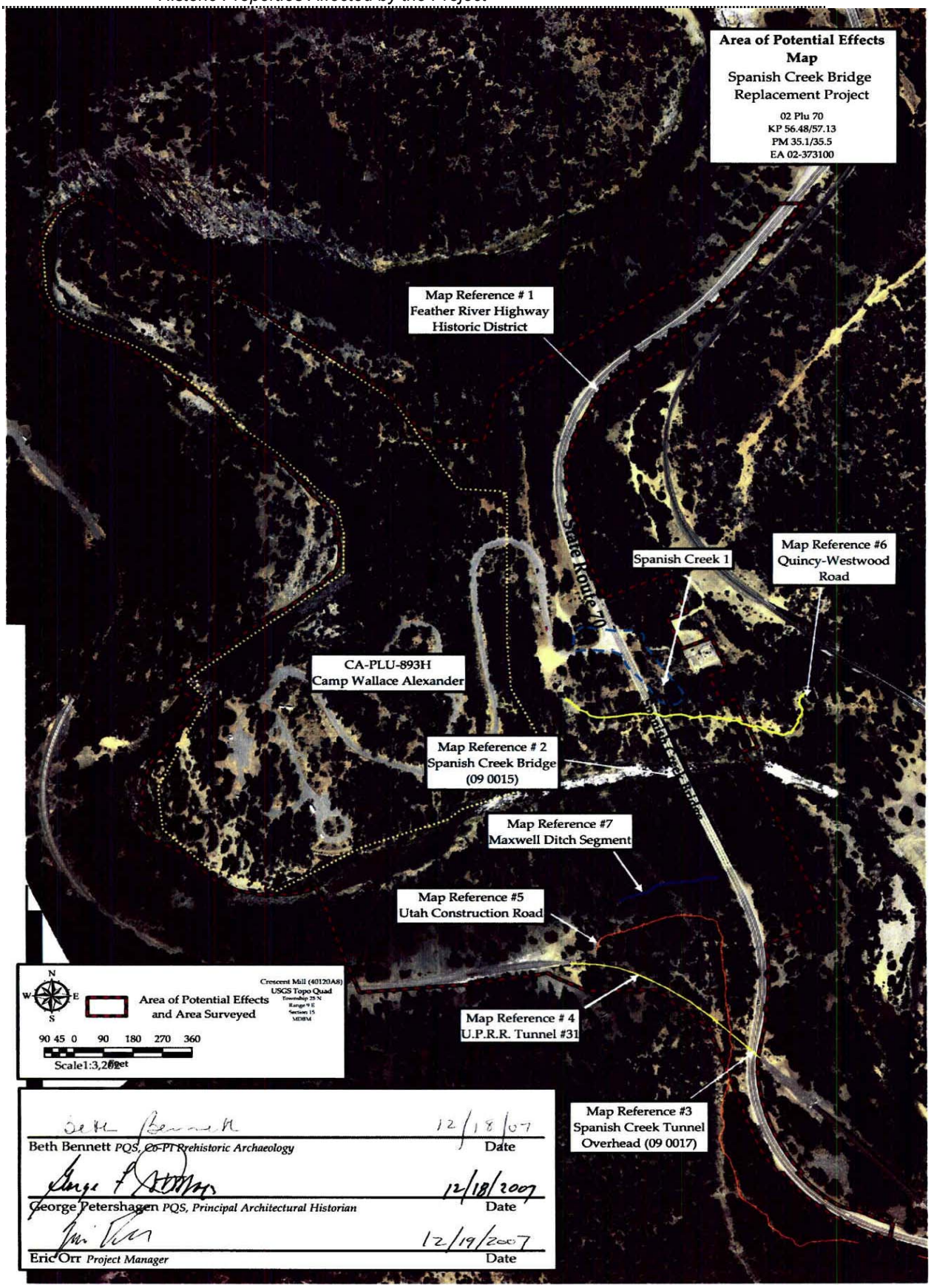
California Department of Transportation, District 2

By _____ Date 7/31/08
Brenda Schimpf, Interim District Director

for By _____ Date 9/11/2008
Allen B. Carlton, Supervisor
Plumas National Forest

EXHIBIT 1

Project APE


Area of Potential Effects Map
Spanish Creek Bridge Replacement Project
02 Plu 70
KP 56.48/57.13
PM 35.1/35.5
EA 02-373100
Map Reference # 1
Feather River Highway Historic District
State Route 70
Spanish Creek 1
Map Reference #6
Quincy-Westwood Road
CA-PLU-893H
Camp Wallace Alexander
Map Reference # 2
Spanish Creek Bridge
(09 0015)
Map Reference #7
Maxwell Ditch Segment
Map Reference #5
Utah Construction Road
Map Reference # 4
U.P.R.R. Tunnel #31
Map Reference #3
Spanish Creek Tunnel
Overhead (09 0017)
N
W
E
S
Area of Potential Effects and Area Surveyed
Crescent Mill (40120A8) USGS Topo Quad
90 45 0 90 180 270 360
Scale1:3,2
Beth Bennett PQS, Co-PI Prehistoric Archaeology
12/18/07
Date
George Petershagen PQS, Principal Architectural Historian
12/18/2007
Date
Eric Orr Project Manager
12/19/2007
Date

Preserving America's Heritage

December 15 2008

Gregory P. King, Chief
Cultural and Community Studies Office
Department of Transportation
Division of Environmental Analysis
1120 N Street
P.O. Box 942874
Sacramento, CA 94274-0001

REF: Proposed Spanish Creek Bridge Replacement Project
Plumas County, California

Dear Mr. King:

On December 12, 2008, the Advisory Council on Historic Preservation (ACHP) received the Memorandum of Agreement (MOA) for the above referenced project. In accordance with Section 800.6(b)(1)(iv) of the ACHP's regulations, the ACHP acknowledges receipt of the MOA. The filing of the MOA, and execution of its terms, completes the requirements of Section 106 of the National Historic Preservation Act and the ACHP's regulations.

We appreciate your providing us with a copy of the MOA and will retain it for inclusion in our records regarding this project. Should you have any questions or require additional assistance, please contact me at (202) 606-8509 or ljohnson@achp.gov.

Sincerely,

LaShavio Johnson

LaShavio Johnson
Historic Preservation Technician
Federal Permitting, Licensing, and Assistance Section
Office of Federal Agency Programs

ADVISORY COUNCIL ON HISTORIC PRESERVATION

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Phone:202-606-8503 • Fax: 202-606-8647 • achp@achp.gov • www.achp.gov

List of Technical Studies Bound Separately

- Natural Environment Study, August 2006, Caltrans
- Natural Environment Study Amendment, March 2008, Caltrans

- Historic Property Survey Report, October 2005, Caltrans
  - Historical Resource Evaluation Report

- Air Quality and Energy Evaluation, September 7, 2006, Caltrans

- Noise Evaluation, July 19, 2006, Caltrans

- Initial Site Assessment (ISA) for Hazardous Waste, September 14, 2000, Caltrans
- Supplemental ISA, June 27, 2005, Caltrans
- Supplemental ISA, December 3, 2007, Caltrans
  - Sandblast Waste Site Investigation Report, October 2005, Geocon Consultants, Inc.
  - Asbestos and Lead-Containing Paint Survey Report, November 2005, Geocon Consultants, Inc.

- Water Quality Assessment Report, August 21, 2006, Caltrans

- Location Hydraulic Study, December 16, 2004, Caltrans
  - Floodplain Evaluation Report Summary

- Visual Site Assessment, February 7, 2005, Caltrans

- Supplemental Visual Site Assessment, July 17, 2006, Caltrans